



State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

Air Quality Board
John M. Veranth, *Chair*
Ernest E. Wessman, *Vice-Chair*
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Stead Burwell
Jerry D. Grover
James R. Horrocks
Scott Lawson
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JoAnn B. Seghini
Don Sorensen
Richard W. Sprott,
Executive Secretary

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQ-089-06

UTAH AIR QUALITY BOARD MEETING

DRAFT AGENDA

**Wednesday, January 3, 2007
1:30 p.m.**

168 North 1950 West (Bldg #2) Room 101

- I. Call-to-Order.
- II. Date of the Next Air Quality Board Meeting: February 7, 2006.
- III. **Approval of the Minutes for December's Board Meeting.**
- IV. **Final Adoption:** 8-Hour Ozone Maintenance Provisions for Salt Lake and Davis Counties, to replace Section IX.D of the Utah State Implementation Plan (SIP), and R307-110-13, Section IX, Control Measures for Area and Point Sources, Part D, Ozone; R307-320, Davis, Salt Lake and Utah Counties, and Ogden City: Employer-Based Trip Reduction Program; R307-325, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Ozone Provisions; R307-326, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Control of Hydrocarbon Emissions in Refineries; R307-327, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Petroleum Liquid Storage; R307-328, Davis, Salt Lake, Utah and Weber Counties and Ozone Nonattainment Areas: Gasoline Transfer and Storage; R307-335, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Degreasing and Solvent Cleaning Operations; R307-340, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Surface Coating Processes; R307-341, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Cutback Asphalt; R307-342, Davis, Salt Lake, Utah and Weber Counties and Ozone Nonattainment Areas: Qualification of Contractors and Test Procedures for Vapor Recovery Systems for Gasoline Delivery Tanks; R307-343, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Emissions Standards for Wood Furniture Manufacturing Operations; and R307-101-2, Definitions. Presented by Robert Clark.

- V. **Final Action:** Delete R307-332, Stage II Vapor Recovery Systems. Presented by Robert Clark.
- VI. **Establishing Schedule for Hearing for Sierra Club** Appeals of IPP and Sevier Power Approval Order. Presented by Fred Nelson
- VII. Informational Items
 - A. **Regional Haze:** Sulfur Dioxide Milestone Report for 2005. Presented by Jan Miller.
 - B. **Compliance.** Presented by Bryce Bird.
 - C. **HAPS.** Presented by Robert Ford.
 - D. **Monitoring.** Presented by Bob Dalley.

In compliance with the American with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Charlene Lamph, Office of Human Resources at (801) 536-4413 (TDD 536-4414).

UTAH AIR QUALITY BOARD MEETING
December 6, 2006

DRAFT MINUTES

I. Call to Order

John Veranth called the meeting to order at 1:32 PM.

Board members present:

Nan Bunker, Jerry Grover, Jim Horrocks, Dianne R Nielson, Wayne Samuelson, Joann Seghini, Don Sorensen, Ernest Wessman, Stead Burwell and John Veranth.

Executive Secretary: Richard W. Sprott

Board member excused:

Scott Lawson

II. Date of the Next Air Quality Board Meeting

January 3, 2006 will be set as a tentative date for the next Board meeting.

III. Approval of the Minutes for November 1, 2006 Board Meeting

- Mr. Wessman made the motion to approve November 1, 2006 minutes.
Ms. Bunker seconded and the Board approved unanimously.

IV. Propose for Public Comment: Amend R307-120, General Requirements: Tax Exemption for Air and Water Pollution Control Equipment. Presented by Tim Blanchard.

Mr. Blanchard stated that in the 1970s the Legislature decided to provide a sales tax credit for pollution control equipment, the program for air and water equipment was written into Title 19, Chapter 2, Air Conservation Act. Since that time, the Division of Water Quality has administered their pollution control credits through R307-120, which is an air quality rule. They would like to propose that R307-120 be amended so that the Division of Water Quality can now write its own rule. The two divisions are working together to make the amendments. They are removing references to water pollution and the Water Quality Board from R307-120 and this will insure that their new rule and our changes become effective on the same date. Mr. Veranth asked when the last

five-year review was. Mr. Carlile stated that it was March 26, 2002 and it is in the plans to be reviewed.

- Ms. Seghini made the motion to propose for public comment: Amend R307-120, General Requirements: Tax Exemption for Air and Water Pollution Control Equipment. Ms. Bunker seconded and the Board approved unanimously.

V. Variance Request-Brigham Young University (BYU), Deseret Towers Demolition. Presented by Bowen Call.

Mr. Samuelson stated that he works with a non-profit organization with BYU. Mr. Call introduced Craig Barrus, Erik Davis, Ole Smith, and Edwin Jackson from BYU. Mr. Davis, counsel for BYU, stated that they have submitted a variance request and it is to give BYU and their contractor relief from the fugitive dust rules during the demolition of Deseret Towers buildings V and W using explosive methods for the implosion. He stated that BYU has taken measures to minimize the impact. They have done extensive preparatory work. They have removed asbestos. It will be a safe process and in a controlled environment.

Mr. Jackson went over the different types of demolition, deconstruction, mechanical, and explosive demolition. He felt that the explosive demolition would be the best due to the fact that the students would be gone for the holidays and they would not be impacted and there would only be a short period of time involved. The explosive demolition would also be less intrusive. Ms. Nielson stated that when the Murray stacks were demolished DEQ had extensive discussions with EPA who had evaluations and showed the steps they would take to minimize dust and remediate impacts afterward. She stated that she appreciated the information provided by BYU, but documentation is lacking. The Board needs to see the steps that are going to be taken and what kind of impact there would be on the environment and the citizens, and if there were an impact, how they would handle it. The Board has not seen the planning or the engineering in this project. Mr. Wessman agreed with Ms. Nielson. He stated that weather, cost analysis, dispersion analysis was not in the application. There needs to be more. Mr. Barrus stated that he recognizes the application is not in enough depth, but BYU has very few windows of opportunity. BYU is concerned for the safety of the students and during the holidays they would be gone.

Ms. Susan Hardy from the Wasatch Front Regional Council suggested moving the time of the demolition to spring or summer. Right now Utah has an inversion and we are close to non-attainment. She would like to end the year without any kind of spike on the monitors. Mr. Veranth stated that winter is not a good time to do this because the PM2.5 will have consequences. Ms. Kathy Van Dame of the Wasatch Clean Air Coalition asked BYU if there was any public notice regarding the matter. Mr. Grover stated that an article was in the Provo Daily Herald. Mr. Sorensen agreed with Mr. Wessman's comments and he stated that this was presented with short notice and there is not a solid plan. There is no public

awareness of public hazards. The whole application is lacking. Mr. Davis stated that this is a learning process for BYU. BYU has removed asbestos and is ready to consider other alternatives and do this in a more safe and rational way. Mr. Sprott stated that the division would be happy to work with BYU on any questions they may have.

- Mr. Wessman made the motion to deny the variance request for Brigham Young University (BYU), Deseret Towers Demolition. Mr. Sorensen seconded and the Board passed the motion unanimously.

VI. Informational Items

A. Sierra Club Requests for Agency Action (Sevier Power and IPP) - Information and Scheduling. Presented by Fred Nelson.

Mr. Nelson stated that two years ago the Sierra Club was denied standing by the Air Quality Board, but just recently the Supreme Court granted the Sierra Club standing. The next step in the process will be the parties getting together to agree upon a schedule, and if they cannot agree on a schedule, they can each submit their own proposal by December 22, 2006. The Board can look at the proposals January 3, 2006.

B. Compliance. Presented by Bryce Bird.

C. HAPS. Presented by Robert Ford.

D. Monitoring. Presented by Bob Dalley.

Mr. Dalley updated the Board on the latest air monitoring.

Ms. Nielson stated that the new Choice calendars were available online on DEQ's website and she provided each of the Board members with one. They include recommendations to make a difference with air pollution, lead base paint, water, and radon. She hoped the calendars will provide good choices for everyone.

Meeting adjourned 2:38 PM.



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DAQ-090-06

MEMORANDUM

TO: Air Quality Board

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Robert Clark, Environmental Scientist

DATE: January 3, 2007

SUBJECT: Final Adoption: *8-Hour Ozone Maintenance Provisions for Salt Lake and Davis Counties*, to replace Section IX.D of the Utah State Implementation Plan (SIP), and R307-110-13, *Section IX, Control Measures for Area and Point Sources, Part D, Ozone*; R307-320, *Davis, Salt Lake and Utah Counties, and Ogden City: Employer-Based Trip Reduction Program*; R307-325, *Davis and Salt Lake Counties and Ozone Nonattainment Areas: Ozone Provisions*; R307-326, *Davis and Salt Lake Counties and Ozone Nonattainment Areas: Control of Hydrocarbon Emissions in Refineries*; R307-327, *Davis and Salt Lake Counties and Ozone Nonattainment Areas: Petroleum Liquid Storage*; R307-328, *Davis, Salt Lake, Utah and Weber Counties and Ozone Nonattainment Areas: Gasoline Transfer and Storage*; R307-335, *Davis and Salt Lake Counties and Ozone Nonattainment Areas: Degreasing and Solvent Cleaning Operations*; R307-340, *Davis and Salt Lake Counties and Ozone Nonattainment Areas: Surface Coating Processes*; R307-341, *Davis and Salt Lake Counties and Ozone Nonattainment Areas: Cutback Asphalt*; R307-342, *Davis, Salt Lake, Utah and Weber Counties and Ozone Nonattainment Areas: Qualification of Contractors and Test Procedures for Vapor Recovery Systems for Gasoline Delivery Tanks*; R307-343, *Davis and Salt Lake Counties and Ozone Nonattainment Areas: Emissions Standards for Wood Furniture Manufacturing Operations*; and R307-101-2, *Definitions*

On September 6, 2006 the Board proposed the document, *8-Hour Ozone Maintenance Provisions for Salt Lake and Davis Counties*, to replace Section IX.D of the Utah State Implementation Plan (SIP). The Board also proposed changes to the associated rules to make them compatible with the new 8-Hour Ozone Maintenance Plan. A 30-day public comment period was held, and a public hearing was conducted on October 17, 2006. No comments related to these proposals were made at the public hearing; however,

some written comments were received. These written comments suggested clarifying changes to the SIP and some of the rules. No substantive changes have been made. A summary of the comments and staff responses is attached, as well as a copy of the updated SIP and rules reflecting the responses to the comments received.

Recommendation: Staff recommends that the Board adopt the Ozone Maintenance Plan, and all of the unchanged proposed rules and revised rules as attached.

Response to Comments

Proposed 8-hour Ozone Maintenance Plan Section IX, Part D and Associated Rule Revisions

Commenters on the 8-hour Ozone Maintenance Plan and Associated Rules

EPA
Kennebecott
KraftMaid
Wasatch Clean Air Coalition

Comments on Proposed Rule Revisions

R307-101-2, Definitions

Comment #1: The current rule makes it clear that all of Salt Lake County is included [*in the SO₂ maintenance area*], but only the elevated part of the east side of Tooele County is included. It seems that the proposed wording leaves it uncertain what “above 5600 feet” modifies – just the eastern portion of Tooele County (as DAQ apparently intends), or that plus Salt Lake County. To ensure that it is clear that all of Salt Lake County will no longer be considered nonattainment for SO₂ (after EPA approves the SO₂ Maintenance Plan), KUCC suggests the phrase “All of” be inserted before the phrase “Salt Lake County” in the proposed change to R307-101-2. [**Kennecott Utah Copper Corporation**]

Staff response. Staff agree. The following changes are made in the rule text.

R307-101-2(d). Definitions.

"Maintenance Area" means an area that is subject to the provisions of a maintenance plan that is included in the Utah state implementation plan, and that has been redesignated by EPA from nonattainment to attainment of any National Ambient Air Quality Standard.

(a)

(b)

(c)

(d) The following area is considered a maintenance area for sulfur dioxide: all of Salt Lake County and the eastern portion of Tooele County above 5600 feet, effective on the date that EPA approves the maintenance plan that was adopted by the Board on January 5, 2005.

R307-320. Ozone Maintenance Areas and Ogden City: Employer-Based Trip Reduction Program.

Comment #2: In other proposed rules, the phrase, “Salt Lake & Davis Counties” has been changed to “Ozone Maintenance Areas.” In R307-320-4 (3)(b)(ii), you have kept “Salt Lake & Davis Counties.” Additionally, R307-320-4(3) (e) states that the “executive secretary shall approve...;” however, in other rules, the word “shall” has been changed to “will.” [**Wasatch Clean Air Coalition**]

Staff response: Staff agree. The following changes are made in the rule text.

R307-320-4. Employer Requirements.

...

(3) Each employer shall design and submit to the executive secretary an approvable trip reduction plan for each work site to meet the target drive-alone rate as specified by the target drive-alone rate schedule in R307-320-3.

...

(b) The trip reduction plan submittal shall adhere to the following schedule:

(i) Submittal of a trip reduction plan shall be annually on or before the anniversary of the initial due date.

(ii) For employers within [~~Salt Lake and Davis Counties~~] ozone maintenance areas:

...

(e) An approvable plan shall contain all the information required in R307-320-4. The executive secretary [~~shall~~will] approve or request revision of the trip reduction plan within 60 days of the plan submittal.

...

R307-325, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Ozone Provisions.

Comment #3: Proposed deletion of generic RACT provisions from prior version "R307-325-2 Existing Sources": While EPA said these provisions were not required as part of the 1-hour ozone SIP, EPA did approve them into the SIP. Thus, the State will need to demonstrate that deletion of these provisions will not interfere with attainment, maintenance, or any other requirement of the CAA, per section 110(1) of the CAA. If all sources potentially subject to the rule were controlled through adoption of specific RACT provisions, this demonstration would consist of a simple certification to that effect. Please note that any analysis should consider pollutants other than ozone, such as PM₁₀ and PM_{2.5}. [EPA]

Staff response. The generic RACT provisions in R307-325 describe Utah's initial approach to address RACT for the ozone maintenance plan. EPA did not accept this approach, and so source-specific VOC RACT determinations were made for major VOC sources. Source-specific NO_x RACT determinations were made for two major NO_x RACT sources and a NO_x RACT waiver was granted for all remaining sources. The generic RACT provisions in R307-325 have never been applied to any source, and deletion of the language will not interfere with attainment, maintenance, or any other requirement of the CAA. The State of Utah certifies that that all sources potentially subject to this rule were controlled through source-specific RACT determinations, or were addressed by the NO_x RACT waiver that was granted in 1997.

Comment #4: This language (in R307-325) confused me; it seemed to imply that the purpose of RACT was to result in evaporation. Possibly it would be clearer if changed to "...result AFTER the application of..." from "...result from the application..." [Wasatch Clean Air Coalition]

Staff response. Staff agree. See modified rule text below.

R307-325-3. Definition and General Requirement.

No person shall allow or cause ~~[volatile organic compounds]~~VOCs to be spilled, discarded, stored in open containers, or handled in any other manner that would result in greater evaporation of VOCs than would have occurred if reasonably available control technology (RACT) had been applied. ~~[, which would result in evaporation in excess of that which would result from the application of control technology that is reasonably available considering technological and economic feasibility.]~~

Comment #5: In the last sentence which states "...control technology that is reasonably available considering technological and economic feasibility." It would be more appropriate to state instead "...reasonably available control technology (RACT)," as this is the term used in the CAA. [EPA]

Staff response. Staff agree. See response to comment #4 above.

Comment #6: Several staff members have commented that although Utah rule requires sources with VOC contaminated rags to keep such rags covered, transporters and launderers of these VOC-laden rags are not required by rule to keep them covered. Please add language that clarifies that transport & laundering of VOC laden rags is subject to the Ozone Provisions. [Wasatch Clean Air Coalition]

Staff response. The ozone RACT rules have been an effective part of the overall plan to bring the area into attainment. If future ozone problems occur then all of the ozone control strategies will be reviewed to identify the most effective ways to further reduce VOC emissions. No changes to the rules have been made at this time to increase the stringency of the rules.

R307-326, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Control of Hydrocarbon Emissions.

Comment #7: This requirement contains no provision for updating the procedure for minimizing VOC emissions during turnarounds. If the procedure is to be maximally effective, it should be reviewed and updated regularly. Significant equipment and procedural changes have taken place since 1990, and any plan prepared then is outdated and likely not useful. Besides being outdated, the lack of reporting requirements could lead a source to believe complying with the procedure is voluntary. Please insert appropriate updating & reporting requirements into this provision. [Wasatch Clean Air Coalition]

Staff response. The ozone RACT rules have been an effective part of the overall plan to bring the area into attainment. If future ozone problems occur then all of

the ozone control strategies will be reviewed to identify the most effective ways to further reduce VOC emissions. No changes to the rules have been made at this time to increase the stringency of the rules.

Comment #8: To make certain that the rule is not mistakenly applied to a copper refinery; KUCC suggests that DAQ add the word “petroleum” before the word “refinery” in the rule title, and before the word “refinery” in the rule purpose and applicability sections of R307-326. [Kennecott Utah Copper Corporation]

Staff response. Staff agree. The following changes are made in the rule title and text.

R307-326. Ozone Nonattainment and Maintenance Areas: Control of Hydrocarbon Emissions in Petroleum Refineries.

R307-326-1. Purpose.

The purpose of R307-326 is to establish Reasonably Available Control Technology (RACT), as required by section 182(2)(A) of the Clean Air Act, for the control of hydrocarbon emissions from petroleum refineries that are located in ozone nonattainment and maintenance areas. The rule is based on federal control technique guidance documents.

R307-326-2. Applicability.

R307-326 applies to the owner or operator of any petroleum refinery located in any ozone nonattainment or maintenance area.

Comment #9: R307-326- 10(3): In order to fulfill the requirements of R307-326-10(1), the first sentence should be changed to read ". . . or approved by the Executive Secretary after obtaining concurrence from EPA." [EPA]

Staff response. R307-326-10(1) describes the process that must be followed before a source could use alternate monitoring methodology, including a requirement for EPA concurrence. It is not necessary to repeat these requirements in R307-326-10(3). The current language was approved by EPA and has been effective.

Comment #10: This rule makes frequent and interchangeable use of “volatile organic compound” and “VOC.” Readability and clarity would be improved if VOC were used consistently after the initial volatile organic compound (VOC). [Wasatch Clean Air Coalition]

Staff response: Staff agrees and made the changes throughout R307-326, R307-340 and R307-343.

R307-327, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Petroleum Liquid Storage.

Comment #11: To make certain that the rule is not mistakenly applied to a copper refinery; KUCC suggests that DAQ add the word “petroleum” before the word “refinery” everywhere it occurs in the proposed Purpose and Applicability sections of R307-327. [Kennecott Utah Copper Corporation]

Staff response. Staff agree. The following changes are made in the rule title and text.

R307-327-1. Purpose.

The purpose of R307-327 is to establish Reasonably Available Control Technology (RACT), as required by section 182(2)(A) of the Clean Air Act, for petroleum refineries and petroleum liquid storage facilities that are located in any ozone nonattainment or maintenance area. The rule is based on federal control technique guidance documents.

R307-327-2. Applicability.

R307-327 applies to the owner or operator of any petroleum refinery or petroleum liquid storage facility located in any ozone nonattainment or maintenance area.

R307-340, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Surface Coating Operations

Comment #12: Several rules reference EPA Guidance documents, for example, “EPA-340/1-88-003, Recordkeeping Guidance for Surface Coating Operations and the Graphic Arts Industry” in R307-340-4(2)(a)(v). These guidance documents cannot be located on the DAQ website, nor are they linked to a site where they are posted, as federal rules are. Compliance and citizen involvement would be easier if these documents were easily located on the DAQ website. [Wasatch Clean Air Coalition]

Staff response. Staff agree. When EPA guidance documents are referenced in the ozone RACT rules, a link to the documents will be included on UDAQ’s web page.

R307-343, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Emissions Standards for Wood Furniture Manufacturing Operations.

Comment #13: R307-343-9(1) requires sources subject to R307-343 to follow the reporting requirements of 40 CFR Part 63, Subpart A, the general provisions of the federal Maximum Achievable Control Technologies (MACT) rule, which regulates hazardous air pollutants. KraftMaid is not subject to the MACT rule, and this reference is confusing. R307-343 already requires all the reports that are required by Subpart A, except for submittal of a compliance certification. We recommend that R307-343-9(1) be deleted, and that the requirement for a compliance certification be added to R307-343-6(4)(c).[**KraftMaid** a company that will begin operation early in 2007 in Salt Lake County. It is the first wood furniture manufacturer in Utah to use a control device to comply with R307-343.]

Staff response. Staff agree. The following changes are included in the rule text.

R307-343-6(4): (c) Each owner or operator of an affected source subject to the provisions of R307-343-4 that complies using a control system, capture device or control device shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to manufacturer's specifications.

(i)...

(ii)...

(iii)...

(iv)...

(v)...

(vi)...

(vii) The owner or operator shall submit a compliance certification with the semiannual report required by R307-343-9(3).

(A) The compliance certification shall state that, during the semiannual reporting period, the monitoring plan has been followed and the operating requirements included in the monitoring plan have been met. If the plan has not been followed, or the operating requirements have not been met, the compliance certification shall identify the dates of noncompliance and the reasons for noncompliance.

(B) The compliance certification shall be signed by a responsible official.

R307-343-9: (1) [~~The owner or operator of an affected source using a control system to fulfill the requirements R307-343 is subject to R307-214-2(1) in which the reporting requirements of 40 CFR Part 63, subpart A are incorporated by reference.~~]

Comment #14: The title of R307-343 is *Ozone Nonattainment and Maintenance Areas: Emission Standards for Wood Furniture Manufacturing Operations*, while R307-343-2, applicability, indicates the rule is applicable to sources ...located in

any ozone nonattainment or maintenance area. Why are they different?
[KraftMaid]

Staff response. In the title of the rule, *and* is appropriate, because the rule is intended to regulate emissions in all areas where compliance with the ozone standard is difficult--that is, all ozone nonattainment and maintenance areas. R307-343-2 stresses that the rule applies to any individual source that is located in any nonattainment or maintenance area. However, to improve clarity, R307-343-1 is revised as follows:

R307-343-1: The purpose of R307-343 is to limit volatile organic compound emissions from wood furniture manufacturing sources located in any ozone nonattainment or maintenance area[s].

Comment #15: R307-343-6(3)(d) still requires submittal of an initial compliance status report, though R307-343-9(2), which specifies the timetable to submit the report, is proposed for deletion. The new R307-343-9(2) addresses the semi-annual report, not the initial compliance status report. In addition, R307-343-10(2) requires submittal of the initial compliance status report within 60 days of initial startup. Because we are using a control device to comply, our Approval Order allows us up to 180 days to test the device, and we may have trouble complying within 60 days. We recommend that the deadline be extended to 180 days. [KraftMaid]

Staff response. Staff agree. Note that the compliance procedures for sources using a control device are specified in R307-343-6(2)(b), while procedures for other sources are found in R307-343-6(2)(a). R307-343-9(1) is revised to address the initial compliance status report:

R307-343-9: (1) ~~[The owner or operator of an affected source using a control system to fulfill the requirements R307-343 is subject to R307-214-2(1) in which the reporting requirements of 40 CFR Part 63, subpart A are incorporated by reference.]~~ The owner or operator of any new source subject to R307-343 that complies using the procedures established in R307-343-6(2)(a) shall submit an initial compliance report within 60 days of initial startup. The owner or operator of a new source subject to R307-343 that complies using the procedures established in R307-343-6(2)(b) shall submit an initial compliance report within 180 days of initial startup. Each initial compliance report shall include the items required by R307-343-6(3).

Comment #16: The new R307-343-10(2) requires that the work practice implementation plan be submitted within 60 days of initial startup, while R307-343-6(3)(d) requires that the initial compliance status report state that the plan has been developed and implemented. Also, R307-343-5(1)(a) requires that the plan be available for inspection at all times, and that the executive secretary can require that

the plan be modified if it does not adequately address the requirements of R307-343-5. We recommend that the requirement to submit the initial work practice implementation plan be submitted within 60 days be dropped. [**KraftMaid**]

Staff response. Staff agrees that requiring the plan to be submitted within 60 days does not add much value; DAQ staff will inspect the new source regularly and can review the plan at that time.

In reviewing this comment, staff believe that all of R307-343-10(2) can be deleted, as the initial compliance status report addressed in R307-343-10(2)(b) is now addressed in R307-343-9(1). The purpose of R307-343-10 is to set a deadline for sources that are located in an area that is designated nonattainment in the future, not to address sources that newly locate into an area that is already designated nonattainment or maintenance.

R307-343-10. ~~[(1)]~~All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.~~[(2) New sources shall submit the following compliance documentation within 60 days of initial startup: (a) Workplace practice implementation plan as required in R307-343—5(1)(a); and (b) Initial compliance documentation as required in R307-343—6(3).]~~

Other Comments about Rule Revisions

Comment #17: R307-327-7(3), R307-328-8(3), R307-335-7(3), R307-340-16(3), R307-342-7(3): Same comment for all; the first sentence should be changed to read ". . . or approved by the Executive Secretary after obtaining concurrence from EPA." [**EPA**]

Staff response. See response to comment #9. In all these rules the process that must be followed, before a source could use alternate monitoring methodology, is described in an earlier paragraph. It is not necessary to repeat the reference to EPA concurrence again. The current language was approved by EPA and has been effective.

Comment #18: Comment on rules regarding potential alternative requirements or deadlines: There are various instances in which the RACT rules allow sources to implement alternative requirements or to meet different deadlines with the executive secretary's or Board's approval. See, for example, R307-326-4(3), -6(3), -7, -9(1), -9(5)(a), 10(2); R307-327-4(1), -6(1)(a) and (c), -6(3)(d), -7(2); R307-328-4(6) and (9), -6(4), -8(2); and similar provisions in the other RACT rules. We recognize that this language appears in the existing EPA-approved SIP. However, as you know, we have expressed concern to State management and staff regarding these types of provisions within the Utah SIP and our belief that these

provisions should be modified or removed. Because the Board will already be considering changes to these rules, we think it would be an appropriate time for the Board to rectify these problems in these rules. One possible approach would be to add language providing an approval or concurrence role for EPA. This would be consistent with some of the language regarding "alternate methods of control" that is already part of the EPA-approved SIP. For example, see the language in R307-326-10(1). If these rules are submitted to us without the requisite changes, we may be unable to act on them or approve them. [EPA]

Staff response. As explained in the comment, these requirements are part of the approved SIP. The ozone RACT rules have been in place, and have effectively reduced VOC emissions since the early 1980's. The provisions to allow sources to implement alternate requirements or to meet different deadlines are important to allow flexibility. These provisions have not been misused during the last 25 years. An extra layer of review would provide no additional air quality benefit.

Responses to EPA Comments on 8-hr Ozone Maintenance Plan

Comment #1: Page 1, footnote 1: There is a typographical error - the correct date for the referenced EPA guidance document is May 20, 2005 and not May 30, 2005.

Staff response. Staff agree. The date has been changed to May 20, 2005

Comment #2: Page 5, paragraph under "Point Source Emissions." This paragraph needs to be clarified: The third sentence indicates that "The 2002 emissions inventory for stationary point sources is based on actual activity levels during the peak ozone season and reflects estimated actual emissions."

We suggest the State supplement this statement by using information from the first paragraph of section 3.3.1 of the TSD, which further describes that actual annual emission inventory data were used from applicable facilities (to meet the triennial emissions reporting requirement of EPA's Consolidated Emissions Reporting Rule or CERR) and that these emission figures were then converted from tons per year to tons per day along with the application of rule effectiveness.

Staff response. Staff agree. The paragraph under "Point Source Emissions" on page 5 has been changed to read:

... The 2002 emissions inventory for stationary point sources is based on actual activity levels during the peak ozone season and reflects estimated actual emissions. *Actual annual emission data were used from applicable facilities to meet the triennial emissions reporting requirement of EPA's Consolidated*

Emission Reporting Rule (CERR). These emissions were then converted from tons per year to tons per day and adjusted to reflect current rule effectiveness.

Comment #3: Page 9, Figure 3: Typographical error in the title - 2018 should be 2014.

Staff response. Staff agree. The title of figure 3 has been changed to 2014.

Comment #4: Page 10, Figure 5: Typographical error in the title — 2018 should be 2014.

Staff response. Staff agree. The title of figure 5 has been changed to 2014.

Comment #5: Page 16, Section 5.a: The introductory statement reads, "The State certifies that all existing RACT controls required in the 1981 Ozone SIP and 1-hour maintenance plan dated September 9, 1998 will remain in effect after approval of this SIP revision." Similarly, referring to the NO_x RACT requirements for utility boilers in the September 9, 1998 1-hour maintenance plan, the introductory language under Section 5.b reads, "These same requirements remain in place and are valid for the 8-hour standard."

Subsequent language under Sections 5.a and 5.b seems to undercut these clear statements. For example, for Hill Air Force Base EPA approved various approval orders into the SIP to ensure that RACT for the base would be enforceable. Section 5.a.(3)(b) on page 17 of the draft maintenance plan refers to MACT standards and state rules as constituting RACT. The draft plan also refers to MACT for Olympia Sales, but EPA also incorporated the approval order for Olympia Sales into the SIP. It is not clear whether the State wants to remove the Olympia Sales approval order from the SIP. We have similar questions regarding Gadsby and Kennecott's Utah Power Plant, as well as stationary source control requirements contained in the EPA-approved PM₁₀ SIP.

The maintenance plan must clearly indicate which control requirements from the EPA approved SIP the State intends to retain and which control requirements the State proposes to delete. To the extent the State proposes to delete control requirements from the EPA-approved SIP, the State will need to provide an analysis showing that deletion will be consistent with sections 110(1) and 193 of the CAA. See 40 CFR 51.905(a)(4) and EPA's May 20, 2005 section 110(a)(1) maintenance plan guidance, response to question 10. Regarding section 110(1), the analysis should not be limited to 8-hour ozone, but should also consider potential effects on other pollutants. In addition, the State will need to retain any deleted control requirements on the list of potential contingency measures in the 8-hour ozone maintenance plan.

Staff response. The State of Utah is not removing any approved RACT measures found in any previous maintenance plan or SIP and is not decreasing the level of control. The specifics for each source are described below.

- a. Hill Air Force Base. RACT for HAFB was determined to be the level of control that existed at the base in 1995. EPA has interpreted this to mean that every approval order condition that existed in 1995 is a SIP condition that would require a SIP modification before a change could be made. This is an unworkable process, and was not what had been intended when the maintenance plan was adopted. The new plan describes RACT in a simpler way that is more stringent than the requirements that existed in 1995. Explanatory language has been added to the plan to explain why the change was made, and how the new way of describing RACT is more stringent than the previous plan.
- b. Olympia Sales. As explained in the plan, Olympia Sales is no longer a major point source because of emission reductions that were required by the MACT for wood furniture (40 CFR 63 Subpart JJ), which is a more stringent requirement than RACT (see note on page 17 of the maintenance plan).
- c. Gadsby. As explained in the plan, the emission limits that were established for the PM₁₀ SIP were determined to meet RACT for the ozone plan. The new PM₁₀ maintenance plan that was adopted in 2005 established a 24-hour plantwide NO_x limit for the Gadsby plant. This limit was based on an approval order that was issued in 2002 to allow the addition of three new natural-gas-fired turbines to the plant. Clarifying language has been added to the plan to explain that the current emission limitation for Gadsby is equivalent to the level that was determined to meet the RACT requirement in the old ozone maintenance plan.
- d. Kennecott's Utah Power Plant. As described in the maintenance plan, the previous RACT determination for this plant has been retained. Clarifying language has been added to the plan to specify the specific limitations for the four boilers that were established in the previous implementation plan.
- e. NO_x requirements in the PM₁₀ SIP. The old ozone maintenance plan referenced the NO_x emission reductions that had occurred as a result of the PM₁₀ SIP as further NO_x controls that contributed to maintenance of the ozone standard. These were not considered RACT, but were part of an overall demonstration that NO_x had been controlled in the area. EPA approved a NO_x RACT exemption for all sources except for the Kennecott Power Plant and the Gadsby Power Plant because the ozone nonattainment area was already meeting the ozone standard. In addition, modeling had demonstrated that the Salt Lake Valley was VOC limited and that NO_x reductions would not be the best approach in this area. The PM₁₀ maintenance plan has since been amended to focus the SIP limits on the larger emission units that were important for the PM₁₀ attainment/maintenance demonstration. The requirements for smaller sources were maintained in approval orders. Any future changes at these sources will be subject to Utah's new source review program that requires BACT as well as emission offsets for these smaller sources. The PM₁₀ maintenance plan demonstrates the effectiveness of these changes.

Comment #6: Page 20, under "Determination of the Contingency Trigger Level and Date," second paragraph, and page 21, under "Timeliness of Contingency Actions," second paragraph: Both of these paragraphs indicate that the contingency trigger date is the date that the AQB determines that one or more contingency measures should be implemented. As indicated in our guidance, the trigger for implementation of contingency measures should, "at a minimum," be upon a monitored violation of the 8-hour ozone NAAQS. The proposed maintenance plan language does not meet this standard and must be changed to indicate that the date a monitored violation occurs is the trigger date for implementation of contingency measures. Our guidance further indicates that the schedule for adoption and implementation of contingency measures should be as expeditious as practicable, but no longer than 24 months.

Also on page 21, in the same paragraph noted, last sentence, the proposed language reads, "Unless otherwise directed, the necessary contingency measures will be adopted and implemented within eighteen months of the trigger date." The words "Unless otherwise directed" must either be removed or changed to read, "Unless a shorter period is prescribed." This change is necessary to ensure that adoption and implementation of contingency measures is not extended beyond 24 months.

Staff response. Staff agree. Wording in sections 6.b. and 6.c. has been modified to more closely follow the guidance provided by EPA. Specifically the first paragraph in section 6.c. now reads, *"The date that certified data shows that a monitoring violation has occurred will be considered the contingency trigger date."*

Also the words "Unless otherwise directed" have been deleted from the last sentence of the second paragraph of 6.c.

Comment #7: Page 21, under "Possible Contingency Measures": Of the seven identified contingency measures, five of these are voluntary and are unlikely to produce prompt, enforceable emission reductions to address a violation of the 8-hour ozone NAAQS.

EPA's May 20, 2005 guidance document entitled "Maintenance Plan Guidance Document for Certain 8-hour Ozone Areas Under Section 110(a)(1) of the Clean Air Act" states on page 5; "Contingency Plan - The State must develop a contingency plan that, at a minimum, will ensure that any violation of the 8-hour ozone NAAQS is promptly corrected." Further, in the response portion to question number 11 of our May 20, 2005 guidance, the first sentence states "The Phase I Rule requires the section 110(a)(1) maintenance plan for scenario B and C areas to include contingency provisions, as necessary, to promptly correct any violation of the NAAQS that occurs (51.905(a)(3)(iii) and (4)(ii))."

Voluntary measures, although beneficial, may or may not receive wide implementation. Therefore, the necessary emission reductions to promptly correct a violation of the 8-hour

ozone NAAQS may not occur. The State should only include contingency measures that would be of a regulatory nature such as, but not limited to; (1) increase the stringency of the cut points in the motor vehicle inspection and maintenance (I/M) programs, (2) revert back to an annual test rather than a biennial test in the I/M programs, and (3) evaluate and require Best Available Control Technology (BACT) for major sources of VOCs rather than only requiring RACT.

Staff response. The State feels that, because of the length of time required to develop rules and install controls, a certain amount of flexibility must be maintained in the choice of contingency measures. Explanatory language has been added to Section 6.d. of the maintenance plan that describes how the state intends to promptly correct any future violation(s) of the 8-hour ozone standard. The State is committed to quickly apply appropriate controls to meet the NAAQS.

Comment #8: Page 23, under 7.a: The maintenance plan needs to be more specific than just say the inventories will be updated "periodically." If you will continue to follow a three-year schedule, the maintenance plan should indicate that the inventories will be updated at least once every three years.

Staff response. Staff agree. The third sentence in section 7.a. has been changed to read:

To verify continued maintenance, the State will update the VOC and NO_x emission inventories for Salt Lake and Davis Counties *at least once every three years*.

Comment #9: Page 23, under 7.b, second sentence: As reflected in our May 20, 2005 guidance, response to question 9, Section 110(a)(1) maintenance plans remain in effect indefinitely, not just for 10 years. The language of the maintenance plan must be changed to indicate that the maintenance plan will remain in effect even after 2014. The maintenance plan can only be modified or removed from the SIP through the SIP revision process, with EPA's approval.

Staff response. Staff agree. The last two sentences in section 7.b. have been changed to read:

It is understood that maintenance plans approved under section 110(a)(1) remain in effect until *amended or repealed*. It is further understood that contingency measures approved as part of 110(a)(1) maintenance plans will remain in effect and that they could still be triggered if an area violates the 8-hour standard after 2014.

Response to other comments on the Proposed 8-Hour Ozone Maintenance Plan

Comment #10: [Wasatch Clean Air Coalition] Please consider adding tracking and developing strategies to reduce highly reactive VOC's. According to EPA, "an approach that discriminates between VOCs based on reactivity is likely to be more effective and efficient. In particular, reactivity based approaches are likely to be important in areas for which VOC control is a key strategy for reducing ozone concentrations. Such areas include: ... Urbanized or other NO_x-rich areas where ozone formation is particularly sensitive to changes in VOC emissions."

This SIP revision is an effort to meet federal NAAQS requirements. However, California recently calculated that, "An estimated 630 deaths [in California] (probable range: 310 to 950) avoided annually if the 8-hour standard of 0.070 hour is attained." A simple comparison of population indicates that 40 Utahns could be saved from premature death if Utah met the standards California is proposing. Other benefits would be decreased hospital and emergency room visits, reduced school absenteeism and new cases of asthma.

Efforts to reduce ozone below current NAAQS will serve all Utahns, and represents a worthy goal for DAQ's efforts. Tracking and developing strategies to reduce highly reactive VOC's is one action Utah could pursue to reduce ozone levels in Utah, even without the trigger of a NAAQS violation.

Staff response. This comment references EPA's *Interim Guidance on Control of Volatile Organic Compounds in Ozone State Implementation Plans* (70FR 54046, September 13, 2005). The guidance summarizes preliminary scientific findings and encourages innovative state applications of reactivity information in the development of VOC control measures. It applies to states or areas currently in an ozone non-attainment status. Utah is in an attainment status.

In this document, EPA states that, "The photochemical reactivity of a compound is a measure of its potential to form ozone. By distinguishing between more reactive and less reactive VOCs, it should be possible to decrease ozone concentrations further or more efficiently than by controlling all VOCs equally." It goes on to say that, "Discriminating between VOCs on the basis of their contributions to ozone formation, or reactivities, is not straightforward. Reactivity is not simply a property of the compound itself; it is a property of both the compound and the environment in which the compound is found. The absolute reactivity of a single compound varies with localized VOC-NO_x ratios, meteorological conditions, the mix of other VOCs in the atmosphere, and the time interval of interest."

Currently, research in both Texas and California is beginning to develop innovative VOC reactivity information that may lead to future control measures. Utah intends to monitor this research and to apply any findings that might be applicable if future VOC reductions are needed. The ozone RACT rules have been an effective part of the overall plan to

bring the area into attainment. If future ozone problems occur then all of the ozone control strategies will be reviewed to identify the most effective ways to further reduce VOC emissions. No changes to the rules have been made at this time to increase the stringency of the rules.

EPA Comments on the Technical Support Document (TSD)

Comment #1: Volume 2, section 3.1.2.2.22, "Fuel Distribution", untitled table at the top of page 3.1.2.2.22-3: The value for the conventional gasoline Reid Vapor Pressure "RVP" listed in this table for the Salt Lake and Davis Counties maintenance area for a summer time emission inventory is shown as 10.6. This is incorrect as by regulation, the summer time RVP for conventional gasoline in the Salt Lake Davis Counties maintenance area is 7.8 psi.

Staff response. All refineries in Utah currently sell gasoline in Salt Lake and Davis Counties during the summer months with a Reid vapor pressure (RVP) of 7.8 psi. The value for Reid vapor pressure in the untitled tables at the top of pages 3.1.2.2.22-3 and 3.1.2.2.22-4 are for calculation of annual emissions. The ozone season RVP discussion begins on page 3.1.2.2-4. In this section the RVP has been changed to 7.8 psi. Calculations that were made using a RVP of 10.6 psi have been revised using the value of 7.8 psi. It should be noted that the original calculations using the 10.6 psi RVP also used an "average annual temperature." The revised calculations using the 7.8 psi RVP incorporated the "peak ozone season day" temperature as defined in volume IV of the mobile source document, "*Procedures for Emission Inventory Preparation.*" As a result of these changes, the "Fuel Distribution with RE" category in the area source inventory, changed by a small fraction. These corrected values for the area source category "fuel distribution with RE" have been reflected in the area source data and the associated VOC demonstration graphs.

Comment #2: Volume 2, section 3.1.2.2.22, "Fuel Distribution", untitled table at the top of page 3.1.2.2.22-4: The value for the conventional gasoline Reid Vapor Pressure "RVP" listed in this table for the Salt Lake and Davis Counties maintenance area for a summer time emission inventory is shown as 10.6. This is incorrect as by regulation, the summer time RVP for conventional gasoline in the Salt Lake Davis Counties maintenance area is 7.8 psi. Also, two column headings in this table may have typographical errors in that they indicate emission factors with and without "Stage II." As Utah does not implement Stage II vapor recovery, these column labels should likely be "Stage I."

Staff response. See response to comment #1. The incorrectly labeled column headings have been changed to read with and without Stage I.

Comment #3: Volume 2, section 3.1.2.2.22, "Fuel Distribution", "111. Sum the Vapor Loss Factors - - - : Untitled table at the bottom of page 3.1.2.2.22-10: The value for the conventional gasoline Reid Vapor Pressure "RVP" listed in this table for the Salt Lake and Davis Counties maintenance area for a summer time emission inventory is shown as 10.6. This is incorrect as by regulation, the summer time RVP for conventional gasoline in the Salt Lake Davis Counties maintenance area is 7.8 psi. Also, column headings in this table may have typographical errors in that they indicate emission factors with and without Stage II, shown as "with S2VR" and "w/o S2VR." As Utah does not implement Stage II vapor recovery, these column labels, and associated emission factors, should likely be "Stage I."

Staff response. Similar to response to comment #1. In this case the table on page 3.1.2.2.22-10 is addressing annual emissions. The ozone season RVP discussion begins on page 3.1.2.2.22-17 and the ozone season table with the 7.8 psi RVP is on page 3.1.2.2.22-19. The incorrectly labeled column headings have been changed to read "with S1VR" and "without S1VR."

Comment #4: Volume 2, section 3.1.2.2.38, "Surface Coatings Traffic Markings": We are curious as to why actual lane-mile data were used from 1995 through 1998, but actual data from 2002 were not considered.

Staff response. Staff used actual lane-miles from 1995 through 1998 because that is what DAQ was provided by the Utah Department of Transportation (UDOT). In 2002, UDOT did not provide actual lane-miles.

Comment #5: Volume 5, "Projections", section 3.1.3.1.22, "Fuel Distribution", untitled table at the top of page 3.1.3.1.22-3: The value for the conventional gasoline Reid Vapor Pressure "RVP" listed in this table for the Salt Lake and Davis Counties maintenance area for a summer time emission inventory is shown as 10.6. This is incorrect as by regulation, the summer time RVP for conventional gasoline in the Salt Lake Davis Counties maintenance area is 7.8 psi. Also, same comment for the table at the top of page 3.1.3.1.22-4, and two column headings in this table may have typographical errors in that they indicate emission factors with and without "Stage II." As Utah does not implement Stage II vapor recovery, these column labels should likely be "Stage I."

Staff response: Similar to response to comment #1. In this case the value for Reid vapor pressure in the untitled tables at the top of pages 3.1.3.1.22-3 and 3.1.3.1.22-4 are for calculation of annual emissions. The ozone season RVP discussion begins on page 3.1.3.1-4. The incorrectly labeled column headings for the table at the top of page 3.1.3.1.22-4 have been changed to read with and without Stage I.

Comment #6: Volume 5, "Projections", section 3.1.3.1.38, "Surface Coatings Traffic Markings": We are curious as to why actual lane-mile data were used from 1995 through 1998, but actual data from 2002 were not considered.

Staff response: See response to comment #4 above.

Utah State Implementation Plan

Section IX, Part D

8-HOUR OZONE MAINTENANCE PROVISIONS FOR SALT LAKE AND DAVIS COUNTIES

Adopted by the Air Quality Board

[~~December 6, 2006~~ January 3, 2007]

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REPLACES Existing Ozone SIP and Maintenance Plan

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REPLACES Existing Ozone SIP and Maintenance Plan

List of Acronyms Used in this Document

ACT	Alternative Control Technique
AIRS	Aerometric Information Retrieval System (an EPA database)
AO	Approval Order
AQB	(Utah) Air Quality Board
BACT	Best Available Control Technology
BEIS2	Biogenics Emission Model
CAA	Federal Clean Air Act, amended in November 1990
CTG	Control Technique Guidance Document
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
EDMS	Emissions and Dispersion Modeling System
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration
HPMS	Highway Performance Monitoring System
I/M	Inspection and Maintenance Program for automobiles
KUC	Kennecott Utah Copper Corporation
LTO	Landing and Take Off
MACT	Maximum Achievable Control Technology, established under Title III of the CAA
MNR	Monitoring Network Review
MOBILE6	A model for mobile source emissions
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MSW	Municipal Solid Waste
NAAQS	National Ambient Air Quality Standards
NAMS	National Air Monitoring Station
NO _x	Oxides of Nitrogen
NONROAD	A model for non road source emissions
NSR	New Source Review
PM ₁₀	Particulate matter with an aerodynamic diameter of less than 10 microns
RACT	Reasonably Available Control Technology
RVP	Reid Vapor Pressure
SBAP	Small Business Assistance Program
SIP	State Implementation Plan
SLAMS	State and Local Air Monitoring Station
T/D	Tons per Day
T/Y	Tons per Year
TSD	Technical Support Document
UDOT	Utah Department of Transportation
UDEQ	Utah Department of Environmental Quality
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WFRC	Wasatch Front Regional Council

D. OZONE MAINTENANCE PLAN

1. Introduction

The State of Utah has developed this maintenance plan for the 8-hour National Ambient Air Quality Standard (NAAQS) in accordance with Section 110(a)(1) of the Clean Air Act (CAA). Salt Lake and Davis Counties were found to be in attainment on July 18, 1995 (60 FR 36723) under the 1-hour ozone NAAQS and have been operating under an approved maintenance plan (62 FR 38213) since July 17, 1997. This maintenance plan demonstrates that Salt Lake and Davis Counties have achieved the 8-hour ozone standard and can maintain compliance with the standard through 2014. The remainder of the State of Utah is currently designated unclassifiable/attainment.

a. Maintenance Plan Overview

This maintenance plan uses an emission inventory approach and demonstrates that projected future emissions will be less than base year emissions. Emission inventories used in this maintenance plan were developed for an actual typical summer day using 2002 as the base year with projections for the years 2005, 2008, 2011, and 2014.

Federal approval of this maintenance plan is necessary to enable the State of Utah to maintain its ozone attainment/maintenance designation under the new 8-hour NAAQS.

b. Historical Background

The original CAA required areas failing to meet the federal ambient ozone standard to develop State Implementation Plans (SIP) with sufficient control requirements to expeditiously attain and maintain the standard. In 1977, Weber, Davis, Utah and Salt Lake Counties were designated non-attainment for ozone. In 1981 the EPA re-designated Weber and Utah Counties as attainment for ozone. In April of 1981, an ozone SIP was submitted to EPA that demonstrated attainment of the standard for both Davis and Salt Lake Counties by May 1, 1984. This ozone SIP submittal was fully approved by the EPA.

In November of 1990, Congress amended the Federal CAA. As a result, Salt Lake and Davis Counties were designated as “moderate” non-attainment areas based on ambient monitoring data for 1988 and 1989. On November 12, 1993 Utah submitted a formal request to EPA that the Salt Lake/Davis County non-attainment area be re-designated to attainment of the NAAQS, and the State, in accordance with the Act, submitted a maintenance plan. In June of 1994, on the basis of a reorganized state submittal and a parallel processing request, EPA issued a finding of “completeness” effective May 12, 1994. On January 5, 1995, the Ozone Maintenance Plan for Salt Lake and Davis Counties was revised. In April of 1995 volatile organic compound (VOC) Reasonably Available Control Technology (RACT) commitments were updated and in August of

1 1995 the contingency measures were revised to be consistent with language in the 1990 amended
2 CAA.

3
4 By March of 1996, the Utah Division of Air Quality (DAQ) had obtained 1994 inventory data
5 and had developed a more realistic methodology for projecting non-road emissions. Since there
6 were no violations or exceedances of the ozone standard in 1994, and since there existed
7 sufficient inventory data, DAQ prepared a new revision of the plan in which 1994 was established
8 as the attainment year inventory for the demonstration of maintenance through the year 2007.
9 The Utah Air Quality Board (AQB) adopted this revision on June 5, 1996.

10
11 By October of 1996, both Salt Lake and Davis Counties had finalized the details of the
12 improvements to their vehicle inspection and maintenance (I/M) programs, which would be fully
13 implemented in 2000 and 1998 respectively. The maintenance plan was revised to reflect the
14 actual I/M programs that would be used in the area. The State also requested an exemption from
15 additional oxides of nitrogen (NO_x) RACT requirements under section 182(f) of the CAA
16 because the area had already attained the ozone standard and additional reductions were not
17 needed to show maintenance of the standard. In July of 1997, the EPA approved the Ozone
18 Maintenance Plan and NO_x RACT exemption for Salt Lake and Davis Counties, effective August
19 18, 1997, and re-designated both counties to attainment for ozone.

20
21 In July of 1997, the EPA established a new, more rigorous standard for ozone. The new
22 8-hour standard was set at a level of 0.08 parts per million (ppm) averaged over an eight-hour
23 period. To take into account extreme and variable meteorological conditions that can influence
24 ozone formation, a violation of the standard occurs when the three-year average of the fourth-
25 highest, maximum value at a monitor exceeds the federal standard. Due to numerical rounding
26 conventions, a violation occurs when the three-year average of the 4th highest daily 8-hour
27 average ozone concentration is equal to or greater than 0.085 ppm.

28
29 On April 30, 2004 (69 FR 23951), EPA published the first phase of its final rule (Phase I Rule) to
30 implement the 8-hour ozone NAAQS. At the same time EPA also published 8-hour ozone
31 designations for all areas of the country. All areas of Utah were designated attainment or
32 unclassifiable. These designations became effective on June 15, 2004. The Phase I rule provided
33 that the 1-hour ozone NAAQS would no longer apply (i.e. be revoked) one year following the
34 effective date of the 8-hour ozone NAAQS, or June 15, 2005. This revocation action was
35 affirmed at 70 FR 44470 on August 3, 2005.

36
37 EPA issued final guidance for the development of the 8-hour ozone CAA Section 110(a)(1)
38 maintenance plan on May 20, 2005. On November 29, 2005, EPA published the "Final Rule to
39 Implement the 8-hour Ozone National Ambient Air Quality Standard (NAAQS) - Phase II."
40 (70 FR 71611)

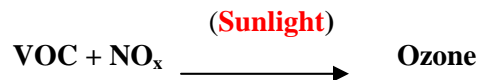
41
42 This maintenance plan was developed in accordance with the guidance and directions included
43 therein.

2. Attainment Emission Inventory

Requirements relating to Attainment Emission Inventory:

- *The state can choose to demonstrate maintenance of the NAAQS using an emissions inventory approach. This approach requires the development of an "attainment emission inventory" to identify the level of emissions in the area that are sufficient to maintain the standard.*
- *The attainment emission inventory should be consistent with EPA guidance, and should include emissions during the time period associated with the monitoring data showing attainment. EPA recommended using the 2002 emission inventory.¹*

Ozone is a gas composed of three oxygen atoms. Ozone at ground level, where it can be inhaled, is a pollutant. It is rarely emitted directly into the air, but rather is the result of a complex chemical reaction between volatile organic compounds (VOC) and oxides of nitrogen (NO_x). These compounds, when combined in the presence of intense sunlight, may cause ground-level ozone to form in harmful concentrations in the air.



This SIP is based on emission inventories of VOC and NO_x, and documents that future emission levels of these precursors to ozone will be lower than present levels. As recommended by the EPA, the State of Utah has chosen to use 2002 as the attainment base year for this maintenance plan. An emission inventory for 2002 was developed to provide a base from which to evaluate future emissions. The emissions inventory is divided into four major source categories: point sources, area sources, mobile sources, and naturally occurring biogenic sources. Mobile sources are further divided into on-road and non-road categories. A short discussion of each of these categories will follow after Figure 2. A more in-depth discussion of each category is included in the Emission Inventory section of the Technical Support Document (TSD).

As required by EPA, DAQ applied rule effectiveness based on the revised rule effectiveness guidance found in Appendix B of EPA-454/R-005-01 entitled "Emissions Inventory Guidance of Ozone and Particulate Matter National Ambient Air Quality Standard (NAAQS) and Regional Haze Regulations." Rule effectiveness is a measure of the ability of the regulatory program to achieve all of the emission reductions possible by full compliance with applicable rules at all covered sources at all times. It reflects the assumption that rules are not typically 100 percent effective at all times.

A summary of the emission inventory for the 2002 base year with interim projections to 2014 is represented in Tables 1 and 2 for a typical summer day during the ozone season (June – August). Figures 1 and 2 represent relative percentages of 2002 emissions by source type. The 2002

¹ Each subdivision of this Plan begins with a summary of the requirements set forth in EPA's *Maintenance Plan Guidance Document for Certain 8-hour Ozone Areas Under Section 110(a)(1) of Clean Air Act*, May [30]20, 2005.

emission inventory, in its entirety, is included in the TSD. A graphical depiction of the emission projections for 2005-2014 and the maintenance demonstration can be found in the next subsection of this plan.

Table 1. Salt Lake and Davis Counties Source Category Totals for VOC (tons/day)

VOC	2002	2005	2008	2011	2014
Point Source	11.24	11.21	11.66	11.96	12.36
Area Source	[89.44] 89.32	[92.27] 92.42	[96.44] 96.30	[401.69] 101.86	[407.54] 107.75
Biogenic Source	120.26	120.26	120.26	120.26	120.26
Mobile On Road	57.66	44.70	35.36	29.11	24.52
Non-Road	29.55	25.47	20.90	18.42	16.57
Total (tons/day)	[307.85] 308.03	[293.94] 294.06	[284.32] 284.48	[281.44] 281.61	[281.25] 281.46
Attainment	[307.85] 308.03	[307.85] 308.03	[307.85] 308.03	[307.85] 308.03	[307.85] 308.03

Figure 1. Salt Lake and Davis Counties 2002 Source Percentage of VOC

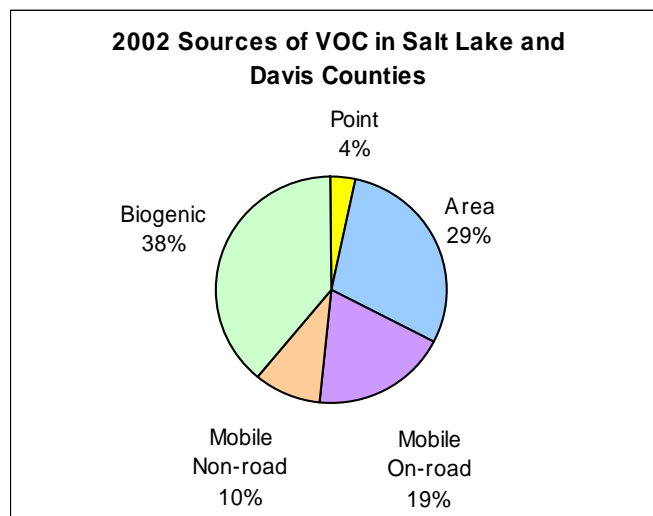
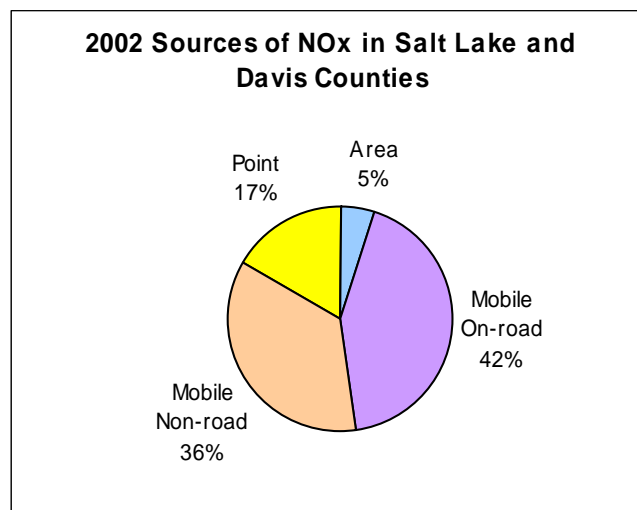


Table 2. Salt Lake and Davis Counties Source Category Totals for NO_x (tons/day)

NO _x	2002	2005	2008	2011	2014
Point Source	39.27	38.09	37.78	36.75	36.82
Area	11.36	10.08	10.79	11.82	12.82
Mobile On-Road	98.89	85.52	65.47	49.45	35.92
Non-Road	83.87	80.35	72.56	63.48	51.30
Total	233.39	214.04	186.60	161.50	136.86
Attainment	233.39	233.39	233.39	233.39	233.39

Figure 2. Salt Lake and Davis Counties 2002 Source Percentage of NO_x



a. Point Source Emissions

Sources included in the point source portion of the attainment year inventory include all stationary sources with actual annual emissions of 100 tons or more of VOC or NO_x. Stationary sources with 2002 actual annual emissions of less than 100 tons of VOC or NO_x were included in the area source portion of the inventory. The 2002 emissions inventory for stationary point sources is based on actual activity levels during the peak ozone season and reflects estimated actual emissions. ~~[In compliance with EPA guidance, emission estimates were adjusted to reflect current rule effectiveness guidance.]~~ Actual annual emission data were used from applicable facilities to met the triennial emissions reporting requirement of EPA's Consolidated Emission Reporting Rule (CERR). These emissions were then converted from tons per year to tons per day and adjusted to reflect current rule effectiveness.

b. Area Source Emissions

The area source inventory estimates VOC and NO_x emissions by county. This inventory includes sources whose annual emissions from any single source location are less than 100 tons for VOC or

1 NO_x. Non-road mobile source emissions such as aircraft maintenance and engine emissions, railroad
2 switch engine and line-haul emissions, and miscellaneous emissions from all other non-road sources
3 are included in the area source inventory, but reported separately as the non-road emission inventory
4 as discussed below. The area source inventory was examined for double counting of emissions
5 already included in the state's point source inventory and adjusted accordingly. All emission
6 estimates in the area source inventory were reported in tons-per-peak-ozone-season day to reflect
7 conditions most typical of higher ozone concentrations.

8
9 Area source emissions include small stationary sources such as gasoline stations and degreasing
10 operations that are controlled through VOC regulatory rules. VOC emissions from vehicle refueling
11 are also included in the area source emissions inventory. In compliance with EPA guidance, emission
12 estimates for area sources covered by existing rules were adjusted to reflect current rule effectiveness
13 guidance. These categories included asphalt paving, yard waste burning, municipal solid waste
14 (MSW) burning, and gasoline transport vehicles.

15 16 **c. Mobile Source Emissions**

17
18 Emissions from on-road mobile sources include all VOC and NO_x from automobiles, trucks, and
19 motorcycles designed for travel on established federal, state, or local roads. Calculated emissions
20 from these vehicles are in the form of tailpipe exhaust, evaporation from the engine and fuel systems,
21 and any other vapor losses during the running and resting of the vehicles.

22
23 Emissions from non-road mobile sources include tailpipe exhaust, evaporation from the engine
24 and fuel systems of vehicles and construction equipment operated on unpaved roads, exhaust
25 emissions or vapor losses resulting from the operation of railroad locomotives, airplanes,
26 recreational, lawn and garden equipment, and from any other portable petroleum-fueled
27 equipment.

28
29 VOC refueling emissions resulting from vehicle refueling at gasoline, ethanol, or natural gas
30 stations are considered area emissions.

31
32 *(1) On-Road Emissions.* The on-road emissions inventory was generated by combining
33 VOC and NO_x emission factors with estimates of peak summer weekday vehicle miles traveled
34 (VMT) in Salt Lake and Davis Counties. Calculated on-road mobile emissions are aggregated by
35 county for a peak ozone weekday. Details on the methodology used to compute emission
36 estimates for the on-road mobile source inventory are delineated in the on-road emission
37 inventory TSD.

38
39 Emission factors were derived from the EPA's mobile sources emissions model, MOBILE6 that
40 provides emission factors for vehicle exhaust tailpipe emissions and evaporative emissions. The
41 September 2003 version of MOBILE6, MOBILE6.1/6.2, incorporates the current federal tailpipe
42 standards required by the CAA. It allows users to input local parameters that describe the vehicle
43 fleet, vehicle emission control programs, the road network, fuel properties and meteorological
44 conditions for the peak ozone weekday.

45
46 All MOBILE6 parameters involving I/M and the anti-tampering programs were measured,
47 estimated, or confirmed by the Salt Lake County and Davis County Health Departments who
48 administer these programs in their respective jurisdictions.

1 Utah Department of Transportation (UDOT) staff issues an annual report entitled *VMT by*
2 *Functional Class*. This summary report tabulates actual VMT in average-annual-daily traffic.
3 VMT is obtained from the Highway Performance Monitoring System (HPMS) database and
4 reports VMT for twelve functional roadway classes in each city and county in the state. The
5 Wasatch Front Regional Council (WFRC) regroups UDOT VMT from twelve to four classes;
6 freeway, ramp, arterial, and local roads. The WFRC Travel Demand Model adjusts the annual
7 average daily VMT to average-summer-weekday VMT using conversion factors provided within
8 the model. The conversion factors and methods are explained in the TSD for on-road mobile
9 sources.

10
11 Since the HPMS model does not estimate vehicle speeds, the WFRC supplied vehicle speed
12 estimates for 2002 using the most recent population, employment, travel, road network, and
13 traffic congestion data.

14
15 (2) *Non-Road Emissions*. Emissions from non-road mobile sources include releases from
16 railroad locomotives, airplanes, recreational vehicles, construction equipment, lawn and garden
17 equipment, and any other non-road petroleum-fueled vehicle or equipment.

18
19 (a) *Trains*. The two railroad companies operating within Salt Lake and Davis
20 Counties submitted reports of their locomotive activities. Line-haul activity was reported
21 in terms of fuel usage while yard activity was reported in terms of number of yard
22 locomotives. These data were combined with emission factors published in EPA's
23 "Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources" (EPA
24 420-R-92-009) to estimate peak-ozone-day emissions.

25
26 (b) *Aircraft Engines*. The WFRC studied and summarized the airport activity of
27 commercial, military, and private aircraft at each airport within the Salt Lake and Davis
28 County area. They reported landing and take off (LTO) counts for specific aircraft types.
29 To further refine commercial aircraft emissions, the publication *Airport Activity Statistics*
30 *of Certificated Route Air Carriers* provided an itemized list of aircraft makers, models
31 and the number of flights. Using the EPA/FAA Emission and Dispersion Modeling
32 System (EDMS) version 4.04 software package, emissions of VOC and NO_x per LTO
33 were calculated. The numbers of LTOs during an ozone day were estimated to produce
34 peak-ozone-day emissions.

35
36 (c) *Other Non-Road Engines*. This section presents the 2002 base year inventory
37 of emissions from non-road engines other than trains and airplanes. Emissions were
38 estimated for each of 212 non-road engine categories and then totaled. Emissions from
39 non-road engine categories associated with the construction, manufacturing, mining and
40 agricultural industries were based on EPA NONROAD version 2004.

41 42 **d. Biogenic Emissions**

43
44 Biogenic emissions are natural VOC losses from forests, field crops, and all other plant matter
45 growing or decomposing within the maintenance area. These emissions were calculated using
46 EPA's BEIS 3.12 model, and incorporated into the emissions inventory for Salt Lake and Davis
47 Counties. Based on future long-range land use planning for the area, these emissions are forecast
48 to remain relatively constant throughout the period covered by this maintenance plan.

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3. Maintenance Demonstration

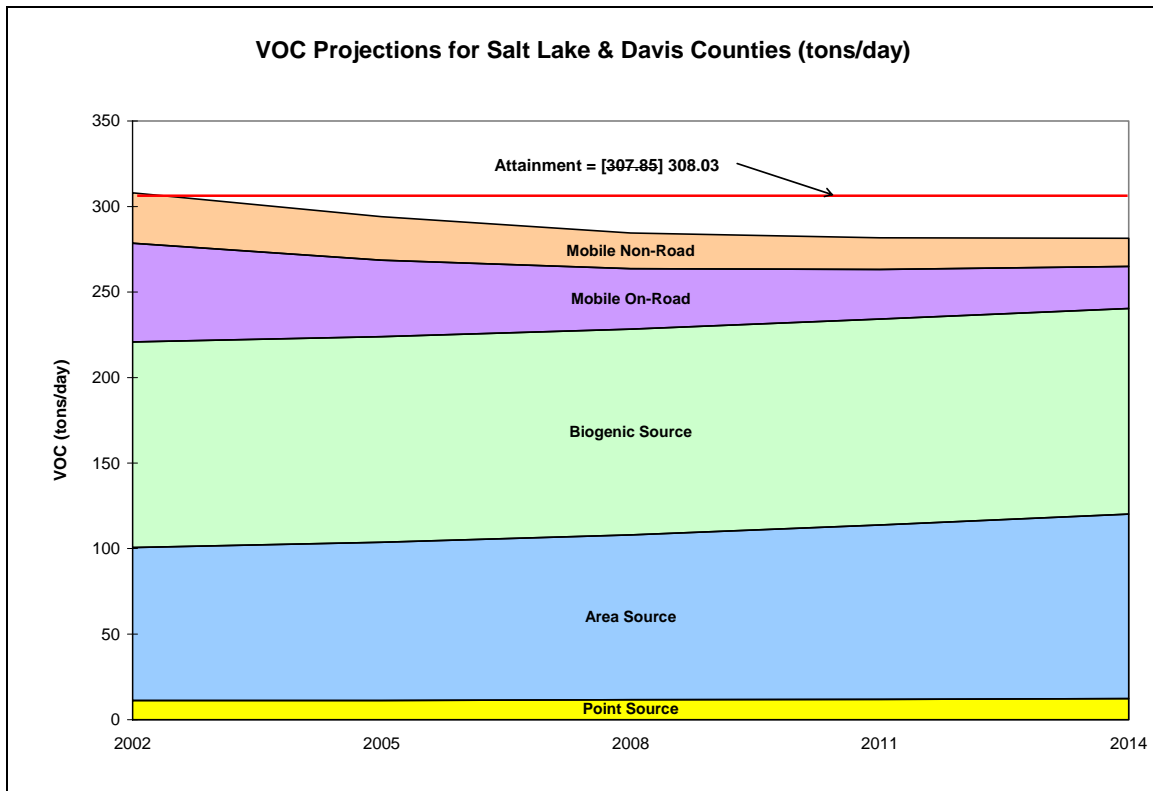
Requirement relating to Maintenance Demonstration:

- *A Maintenance Demonstration is a compilation of Projection inventories that demonstrate how an area will remain in compliance with the 8-hour ozone standard for the ten-year period following the effective date of designation as unclassifiable or attainment. For areas with an effective date of designation for the 8-hour NAAQS of June 15, 2004, the end projection year shall be 2014 and must show attainment.*

a. Base Year and Projected Emission Inventories

The attainment emission inventory reported in section IX.D.2 documents a level of emissions in Salt Lake and Davis County that is sufficient to maintain the 8-hour NAAQS for ozone through 2014. Emissions projections for each source category are used to determine if expected emission levels in future years will exceed the 2002 attainment emission inventory level. Maintenance of the NAAQS is demonstrated if the projected emissions remain below the 2002 level. Figures 3 and 5 graphically demonstrate that the projected VOC and NO_x emission inventories remain below the 2002 level, through the year 2014. Summary tables showing VOC and NO_x peak ozone season daily emissions in tons/day are included in the TSD.

Figure 3. VOC Projections through 2014 for Salt Lake and Davis Counties (tons/day)



Figures 4 and 6 give a pictorial look at the sources of VOC and NO_x for the attainment year of 2002 and the end projection year of 2014.

Figure 4. Salt Lake and Davis Counties 2002 and 2014 VOC Sources

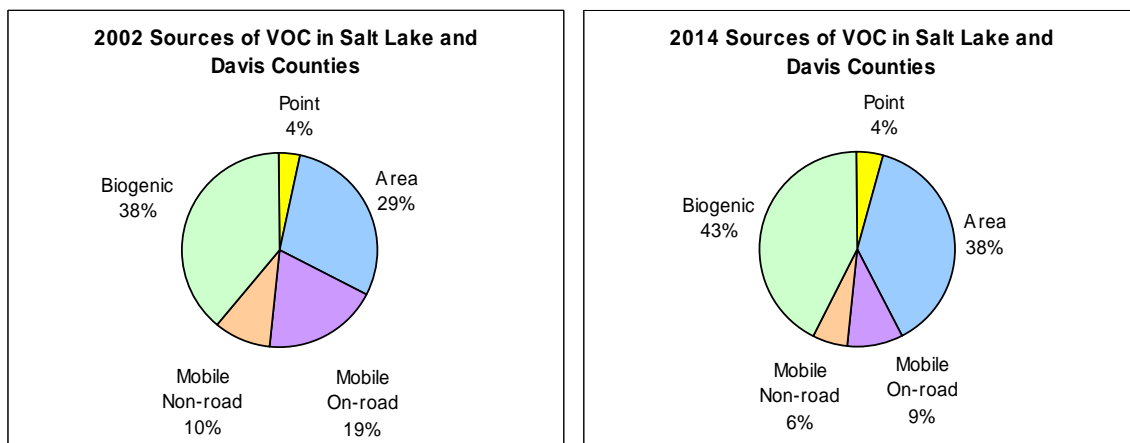


Figure 5. NO_x Projections through 2014 for Salt Lake and Davis Counties (tons/day)

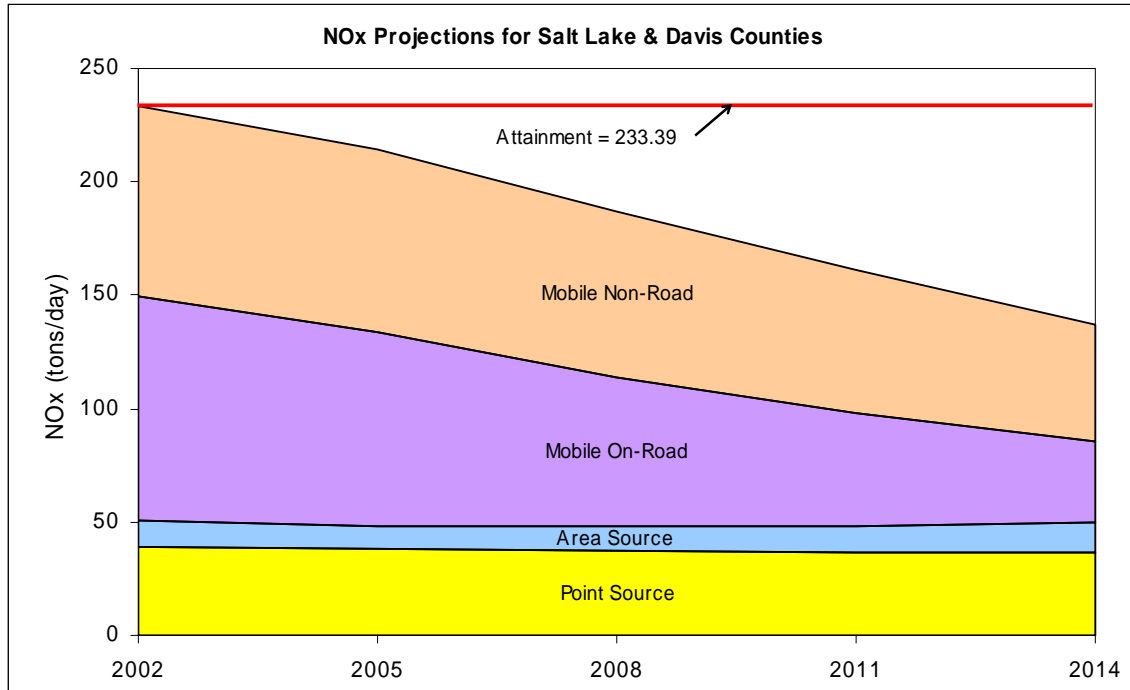
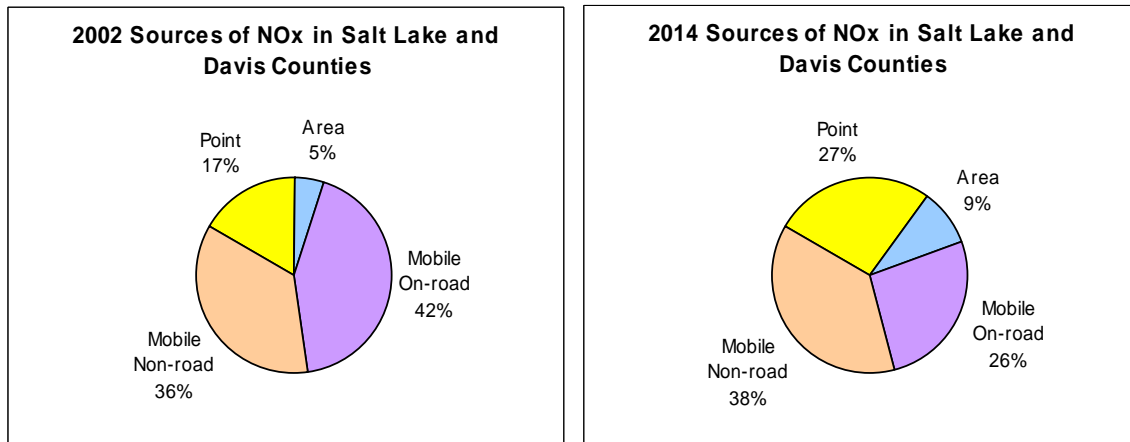


Figure 6. Salt Lake and Davis Counties 2002 and 2014 NO_x Sources



The Utah DAQ will track the progress of this maintenance plan by periodically reviewing future emission inventories to verify that emission levels of VOC and NO_x do not surpass those presented in Subsection 2 above.

1
2 A short discussion of how emissions were projected for each of the major source categories
3 follows. Additional discussion is provided in the Emission Inventory section of the TSD.
4

5 **b. Methodology for Projecting Emissions**

6
7 (1) *Point Sources*. Employment growth factors published by the Demographic and
8 Economic Analysis section of the Governor's Office of Planning and Budget were used to project
9 point source emissions.
10

11 The point source attainment year inventory contains a listing of emissions by individual sources
12 that compose each plant's actual emissions. The reliability of these projections is reinforced by
13 the continued maintenance of existing rules (R307-325 through 342) that regulate the operations
14 of all VOC sources in Salt Lake and Davis Counties. The New Source Review (NSR) rules that
15 specify pollution control requirements for any new sources or modifications to existing sources
16 also reinforce the reliability of this emission projection inventory.
17

18 (2) *Area Sources*. Growth factors for estimating end projection year emissions for area
19 sources were based on the most recent population and sector-specific employment growth data
20 published by the Governor's Office of Planning and Budget.
21

22 (3) *Mobile Sources*. Projected mobile source emissions were broken down into on-road
23 and non-road categories described below.
24

25 (a) *On-Road Emissions*. Projected on-road emissions for future years are
26 generated by combining VOC and NO_x emission factors with projections of average
27 summer weekday vehicle miles traveled (VMT) within Salt Lake and Davis Counties.
28 VMT projections are obtained from the WFRC Travel Demand Model.
29

30 (b) *Non-Road Emissions*. Projected non-road emissions were broken down into
31 railroad engines, aircraft engines, and miscellaneous non-road equipment categories as
32 described below.
33

34 (i) *Railroad Engines*. Growth factors for estimating projection year
35 emissions are based on industrial employment growth derived from the
36 Governor's Office of Planning and Budget. Emissions were estimated to
37 increase at the rate of employment growth within the Transportation,
38 Communications, and Public Utilities segments of industry.
39

40 (ii) *Aircraft Engines*. Growth figures for all aircraft emissions in Salt Lake
41 and Davis Counties were provided by the Wasatch Front Regional Council
42 (WFRC). These growth figures are applied to the daily emissions calculated in
43 the 2002 attainment inventory to obtain emissions projections through 2014.
44

45 (iii) *Miscellaneous Non-Road Equipment*. EPA's NONROAD version 2004
46 software was run for all projection years.
47

48 (4) *Biogenic Emissions*. Biogenic emissions will remain constant in Salt Lake and Davis
49 Counties unless significant changes occur in land use, which is not anticipated. The typical

1 summer day emissions were calculated by taking the average of June, July, and August total
2 emissions.
3
4

5 **4. Monitoring Network/Demonstration of Continued Attainment**

6
7 *Requirement related to Ozone Monitoring:*
8

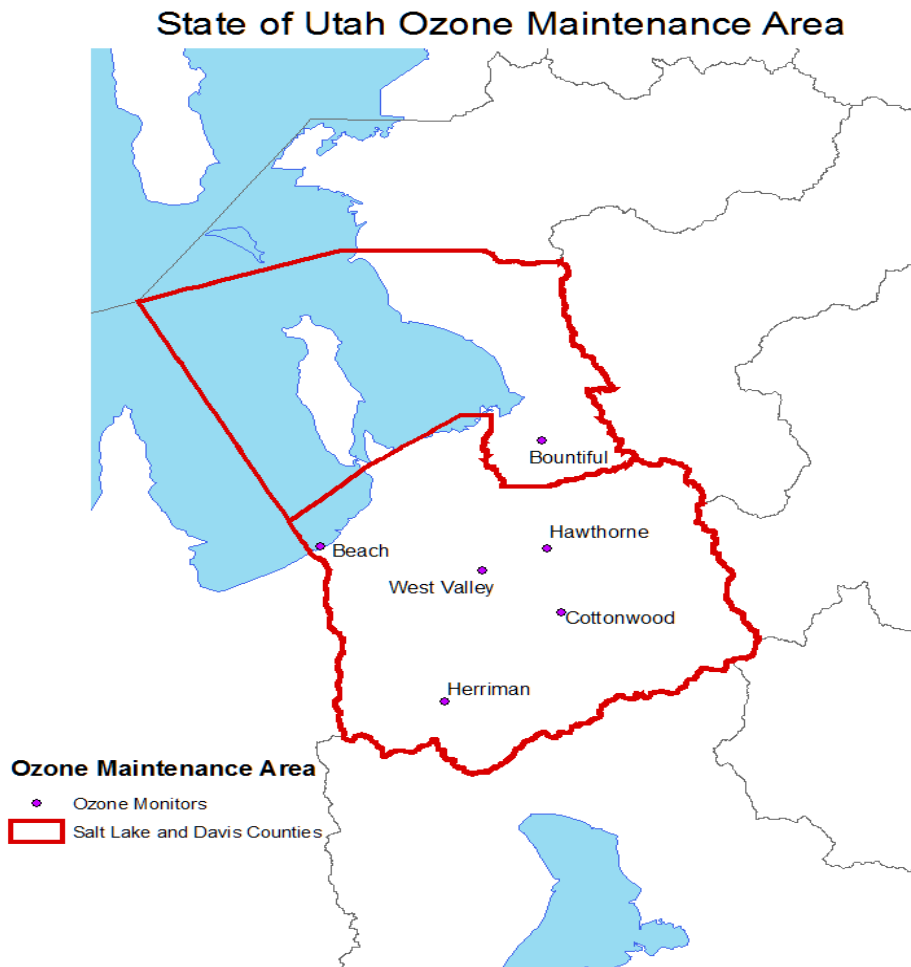
9 - *Three consecutive years of Ozone monitoring data must show that violations of*
10 *the standard have not occurred. The standard is the annual fourth-highest daily*
11 *maximum 8-hour ozone concentration, expressed in parts per million, averaged over*
12 *three years. Thus the three-year average of the annual fourth-highest daily 8-hour*
13 *average ozone concentration must not exceed 0.08 ppm to meet the standard. Due to*
14 *rounding conventions, the fourth-highest daily 8-hour average ozone concentration may*
15 *not exceed 0.084 ppm.*
16

17 **a. Ozone Monitoring Network**

18
19 Information regarding ozone monitoring in Utah is included in the Monitoring Network Review
20 (MNR). Since the early 1980s the MNR has been updated annually and submitted to the EPA for
21 approval. EPA personnel have concurred with the annual network reviews and agreed that the
22 network is adequate. They have also visited the monitoring sites on several occasions to verify
23 compliance with federal siting requirements. The ozone monitoring season in Utah is May
24 through September (40 CFR Part 58, Appendix D, 2.5). The highest ozone values usually occur
25 during the months of June, July and August.
26

27 The valley setting of Salt Lake and Davis Counties complicates ozone monitoring of the major
28 urban area along the Wasatch Front. Typical ozone monitoring at sites on flat terrain in wide-
29 open spaces find the peak ozone monitoring station located 5 – 7 hours down wind from the
30 urban area. Because Salt Lake and Davis Counties have a large body of water on their west side
31 (Great Salt Lake) and a major mountain range (Wasatch) on their east side, summer wind patterns
32 result in a diurnal on-shore/off-shore wind flow. This pattern suggests that after 5 – 7 hours the
33 polluted air mass may in fact return to the urban area where the ozone precursors originated.
34 Figure 7 depicts the relative locations of the ozone-monitoring network within Salt Lake and
35 Davis Counties.
36

1 **Figure 7. Ozone Monitoring Network within Salt Lake and Davis Counties**



3
4
5
6 The following ozone monitoring stations were operating in Salt Lake and Davis Counties during
7 the period 1999 through 2005. Pertinent ozone monitoring station data is delineated below with
8 additional information in the TSD.

9
10 **Beach** (AIRS ID #49-035-2004). This site is located at the Great Salt Lake Marina close
11 to the western border of Salt Lake County. The site has been in existence for many years
12 to measure PM₁₀ and SO₂. Ozone monitoring equipment was added to the site as a result
13 of an ozone saturation study that showed high concentrations of ozone in this area. The
14 ozone monitoring equipment began operating on May 17, 1994.

15
16 **Bountiful** (AIRS ID # 49-011-0004). In the city of Bountiful in Davis County, ozone has
17 been measured at two different locations since February of 1975. On July 22, 2003 the

monitoring station was moved approximately three-quarters of a mile north to the current location at 171 West 1370 North on the grounds of Viewmont High School. The move was necessitated by the construction of a new city fire station on the original site. The new site is in a similar residential setting, centrally located and representative of a large part of the city of Bountiful.

Cottonwood (AIRS ID # 49-035-0003). Based on wind trajectories this site was determined to be the site that would measure the maximum ozone concentration in the Salt Lake area. It is located in a residential area approximately nine miles south of the Central Business District. Monitoring began at this site in December of 1980.

Hawthorne (AIRS ID # 49-035-3006). This site is located in a residential area near downtown Salt Lake City. It is representative of a large part of Salt Lake City. Monitoring began at this site on January 1, 1997.

Herriman (AIRS ID #49-035-3008). This site is located in the southwest corner of the Salt Lake Valley in a predominantly rural area. The site was added as a result of a 1993 ozone saturation study that showed high concentrations of ozone in this area. The ozone monitoring equipment began operating on May 1, 1994.

West Valley (AIRS ID # 49-35-3007). West Valley City is the second largest city in the State of Utah and is located in the north central area of the Salt Lake valley. This site was chosen to determine ozone concentrations in an area where a large percentage of the population is clustered. Monitoring at this site began on January 21, 1999.

b. Ozone Monitoring Data

Table 3 represents monitoring data for the Salt Lake and Davis County monitoring sites. For each site, the 4th maximum 8-hour ozone concentration along with the three-year average of the 4th maximum ozone concentration is presented.

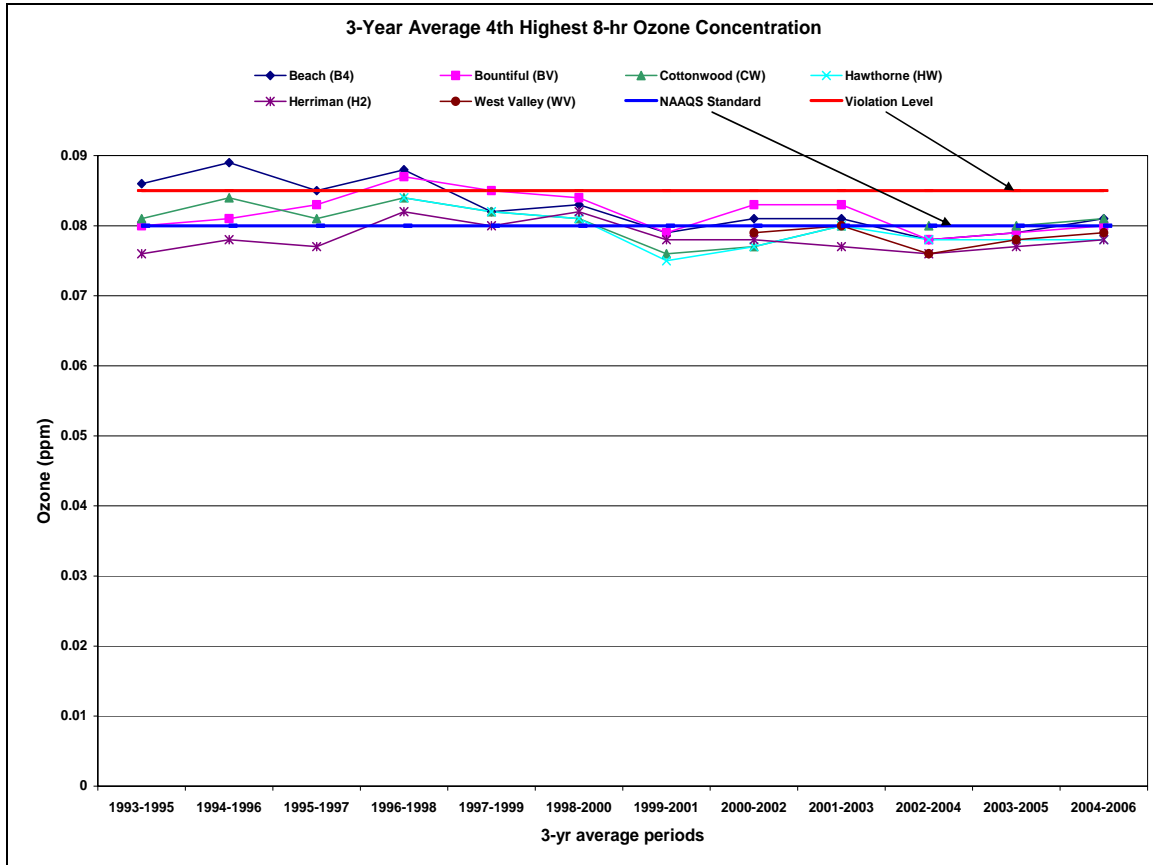
Table 3. Salt Lake and Davis Counties Individual Monitor 4th Highest Ozone and Three-Year Average 4th Highest Ozone Values* (ppm)

Monitoring Site	2000	2001	2002	2003	2004	2005	2000-02 8 hr avg	2001-03 8-hr avg	2002-04 8-hr avg	2003-05 8-hr avg
Beach	0.078	0.082	0.083	0.077	0.075	0.086	0.081	0.081	0.078	0.079
Bountiful	0.078	0.081	0.089	0.079	0.067	0.092	0.083	0.083	0.078	0.079
Cottonwood	0.072	0.076	0.082	0.083	0.074	0.084	0.077	0.080	0.080	0.080
Hawthorne	0.073	0.075	0.084	0.081	0.069	0.083	0.077	0.080	0.078	0.078
Herriman	0.081	0.076	0.078	0.076	0.074	0.080	0.078	0.077	0.076	0.077
West Valley	0.074	0.084	0.079	0.078	0.071	0.085	0.079	0.080	0.076	0.078
Avg 4 th High	0.076	0.079	0.083	0.079	0.072	0.085	0.079	0.080	0.078	0.079

* **Bold** values represent exceedance of National Ambient Air Quality Standard

Figure 8 depicts the three-year 4th highest ozone concentration average trend since the 1993-1995 periods.

Figure 8. Three-Year Period Ozone Averages (1993-2005)



c. Review of Monitoring Network

The existing monitoring network for ozone consists of thirteen monitoring sites located primarily in the populated counties along the Wasatch Front. DAQ considers the present configuration appropriate to reflect the current source and population areas in Salt Lake and Davis Counties. The DAQ will gain EPA approval before making any changes to the current monitoring network configuration. The DAQ will continue to operate and maintain an adequate air quality monitoring network in accordance with 40 CFR 58, *Ambient Air Quality Surveillance*, to verify the continued attainment of the 8-hour ozone NAAQS. The DAQ will continue to conduct annual reviews of the ozone monitoring network in accordance with 40 CFR 58.20(d) to determine whether the system continues to meet the monitoring objectives presented in Appendix D of 40 CFR Part 58.

5. Existing Regulations and Controls

Requirements relating to existing regulations:

- *Anti-backsliding provisions established in 40 CFR 51.905(a)(4) ensure that emission control strategies that were implemented to address the 1-hour ozone standard are maintained when the area transitions to an 8-hour maintenance plan. The applicable requirements that are listed in 40 CFR 51.900(f) must be maintained, unless the state requests that these obligations be shifted to contingency measures.*

Utah has maintained the requirements in this plan as described below:

a. Reasonably Available Control Technology (RACT)

The State certifies that all existing RACT controls required in the 1981 Ozone SIP and 1-hour maintenance plan dated September 9, 1998, will remain in effect after approval of this SIP revision.

(1) VOC Sources Covered by a CTG issued after 1990 – CAA 182(b)(2).

Negative Declaration - In the 1-hour maintenance plan, Utah determined that there were no VOC sources covered by a Control Technique Guideline (CTG) issued after 1990.

(2) VOC Sources Covered by a CTG issued before 1990. In the 1981 SIP and the 1-hour ~~and~~ Maintenance Plan, dated September 9, 1998, the State of Utah established required controls under Section 182(b)(2) of the CAA. Utah is currently enforcing a set of RACT regulations that are based on CTGs developed by EPA. These state RACT regulations are implemented by the following rules in the Utah Administrative Code.

- R307-325 General Requirements
- R307-326 Control of Hydrocarbon Emissions in Refineries
- R307-327 Petroleum Liquid Storage
- R307-328 Gasoline Transfer and Storage
- R307-335 Degreasing and Solvent Cleaning Operations
- R307-340 Surface Coating Operations
- R307-341 Cutback Asphalt
- R307-342 Qualifications of Contractors and Test Procedures for Vapor Recovery Systems for Gasoline Delivery Tanks

(3) Major Stationary Sources that are not covered by a CTG. The State of Utah has identified the following major sources (100 t/y or more) of VOC emissions in the Salt Lake and Davis County attainment area. RACT for these major stationary sources that are not covered by specific CTGs or ACTs is listed below. In addition, NO_x emission limitations for most of these major sources are presented in Subsection IX.H.2 of the SIP.

Major Source Name

Type of Source

Chevron	Refinery
Flying J	Refinery
Holly Refining and Marketing (Formerly Phillips)	Refinery
Pioneer Investments	Gasoline Bulk Terminal
Silver Eagle (Formerly Crysen)	Refinery
Tesoro West Coast (Formerly Amoco)	Refinery
Hill Air Force Base	Military Installation

NOTE: *Olympia Sales, which was a major source in the previous 1-hour maintenance plan, is no longer a major source. Its emissions are now covered by the Maximum Achievable Control Technology (MACT) requirements for Wood Furniture (40 CFR 63 Subpart JJ), which is more stringent than RACT.*

(a) Refineries. VOC RACT for the five refineries and one bulk terminal plant located in Salt Lake and Davis Counties is established by R307-326, 327 and 328.

(b) Hill Air Force Base - In 1995, the State of Utah evaluated the operations of Hill Air Force Base (HAFB), and determined that the current operations met the standard of reasonably available control technology and that further emission reductions were not required. The approval orders for HAFB were listed in the SIP to document the current operations. The SIP noted that any future changes at HAFB would be required to meet best available control technology (BACT) according to Utah's new source review requirements. To further ensure that RACT continues to apply, Utah's new source review rules were modified to require that BACT be at least as stringent as any Control Technique Guidance (CTG) document that has been published by EPA and is applicable to the source (R307-401-8(1)(a). The Notice of Intent for any proposed source or modification is required to consider any CTG and Alternative Control Technique documents that are applicable to the source.

The State of Utah never intended that all of the conditions in the HAFB approval orders be adopted as SIP conditions, and has never enforced the SIP in that manner. If that had been the intent, then specific SIP limitations would have been included in Section IX.H of the SIP as had been done for the PM₁₀ SIP. Unfortunately, EPA interpreted the inclusion of these approval orders in a different manner, and considered any changes to the approval orders to be a SIP revision that would need to go through the lengthy process of Board approval and EPA approval. This was completely unworkable for a complicated source such as HAFB that needs to make changes frequently to adapt to new workloads to support national security objectives.

To resolve this problem, the State of Utah has worked with HAFB to identify new ways to describe RACT for the base that would meet the same goal of ensuring that the level of control in 1995 was retained, without requiring a SIP revision every time changes were needed, such as the installation of a new emergency generator. Since 1995, Maximum Achievable Control Technology (MACT) standards have been issued by EPA to control air toxics. These MACT standards, as a side benefit, have increased the level of VOC control beyond the level that was required in 1995. In addition, coating and

1 surface cleaning operations at the base were already controlled by Utah's RACT rules
2 (R307-327, 328, 335 and 340). These underlying standards regulate 86% of the VOC
3 emissions from HAFB (excluding aircraft landing and take-off emissions). The
4 remaining fourteen percent of VOC emissions will be regulated by the forthcoming
5 Military MACT. Because these underlying standards establish an overall level of control
6 that is more stringent than what was required in 1995, the State of Utah is changing the
7 description of RACT to be these underlying standards. It is important to note that all
8 changes at HAFB since 1995 have been required to meet BACT standards under Utah
9 new source review rules. This new methodology for describing RACT is workable, and
10 is more stringent than the previous listing of approval orders in the plan.
11

12 RACT for Hill Air Force Base is established by a combination of MACT
13 Standards (40 CFR 63), NSPS Standards (40 CFR 60), and operationally-specific-state
14 rules (R307-327, 328, 335 and 340) that currently regulate over eighty-six percent of the
15 total VOC emissions originating from Hill Air Force Base. The remaining fourteen
16 percent of the VOC emissions generated at Hill Air Force Base will be regulated by the
17 forthcoming Military MACT. In addition, VOCs produced by refrigerant processes are
18 controlled by 40 CFR 82 (Stratospheric Ozone).
19

20 (4) *New Sources of VOC.* Any new major or minor source permitted in the future in the
21 ozone maintenance area will be required to meet the Best Available Control Technology (BACT)
22 requirements delineated in R307-401, that will be at least as stringent as RACT.
23

24 **b. NO_x Requirements under Section 182(f) of the CAA**

25

26 In the previous 1-hour Maintenance Plan dated September 9, 1998, NO_x RACT requirements for
27 utility boilers were implemented to demonstrate attainment and maintenance of the 1-hour ozone
28 standard. These same requirements remain in place and are valid for the 8-hour standard.
29

30 (1) ~~The Gadsby Plant owned by PacifiCorp underwent a RACT determination in~~
31 ~~1990 as part of the SIP for particulate matter less than ten microns (PM₁₀) and is currently~~
32 ~~regulated under Section IX Part H of the SIP. Under that determination the facility was~~
33 ~~required to switch fuel from coal to natural gas and to use low NO_x burner technology.~~
34 ~~As a result, this facility is now operating within regulated limits specified in Section IX,~~
35 ~~Part H of the SIP.] The Gadsby Power Plant owned by PacifiCorp switched from coal to~~
36 natural gas in 1990 as part of the reasonably available control measures required for the
37 PM₁₀ SIP. The facility was prohibited from burning coal and low NO_x burners were
38 installed. In 1995, the State of Utah determined that these control measures achieved a
39 more stringent emission rate than the presumptive NO_x RACT rate for coal-burning units,
40 as defined in EPA's Alternative Control Technique document titled "NO_x Emissions from
41 Utility Boilers." On April 3, 2002, PacifiCorp received an approval order to add three
42 new turbines to the plant. This approval order underwent Prevention of Significant
43 Deterioration (PSD) analysis for NO₂, the turbines were required to meet the lowest
44 achievable emission rate (LAER) for NO_x because the plant is located in a nonattainment
45 area for PM₁₀, and NO_x offsets were required. In 2005, the PM₁₀ maintenance plan was
46 revised to establish an overall daily emission rate for NO_x for the entire Gadsby Power
47 Plant that was based on the new approval order.
48

The State of Utah has determined that the current NO_x emission limitations for the Gadsby Power Plant in Section IX, Part H of the State Implementation Plan are equivalent to the NO_x emission limitations that were determined to meet RACT for the three existing utility boilers in 1995 and are, therefore, considered RACT for the purposes of the ozone maintenance plan.

(2) The Utah Power Plant owned and operated by Kennecott Utah Copper (KUC) underwent a RACT determination in 1995. KUC installed low NO_x burners on Boilers #1, #2, and #3, which ~~[meet an]~~are required to meet a NO_x emission limitation of 216 lb/hr, and 426.5 ppmdv (measured at 3 percent oxygen). ~~[This is equivalent to 0.50 lb NO_x/mmBtu. This was determined RACT effective May 31, 1995.]~~ Boiler #4 is required to meet a NO_x emission limitation of 377 lbs/hr and 384 ppmdv (measured at 3 percent oxygen).

c. Rate of Progress (ROP) Reductions.

The ROP requirements in section 182(b)(1) do not apply because EPA determined that Salt Lake and Davis Counties attained the ozone standard on July 18, 1995 (60 FR 36723).

d. Inspection and Maintenance (I/M) Programs

The previous 1-hour maintenance plan, dated September 9, 1998, stated that Salt Lake and Davis Counties had finalized the details of the improvements that would be included in the new I/M programs. The new programs became effective in Davis County in 1998 and Salt Lake County in 2000. The standards for each county are different due to varying test procedures and average vehicle speeds.

The current performance standards are based on MOBILE6 modeling of the current I/M and anti-tampering programs. The MOBILE6 I/M performance standards for Salt Lake and Davis Counties are presented in Tables 4 and 5. Additional information regarding I/M Program Performance Standards is included in the TSD.

Table 4. Salt Lake Co. – I/M Performance Standard
(Emission Factors in grams/mile @ 30.8 mph)

Pollutant	2002	2005	2008	2011	2014
VOC	1.28	0.91	0.65	0.48	0.37
NO _x	1.22	1.01	0.67	0.47	0.34

Table 5. Davis Co. – I/M Performance Standard
(Emission Factors in grams/mile @ 36.6 mph)

Pollutant	2002	2005	2008	2011	2014
VOC	1.43	1.04	0.78	0.63	0.49
NO _x	1.30	1.06	0.73	0.55	0.40

1
2 **e. Major Source Applicability Cut-offs for Purposes of**
3 **RACT**
4

5 Cut-offs for major sources of VOC in the Salt Lake and Davis County attainment area are
6 identified in Subsection a(3) above. RACT requirements for these sources are in effect as defined
7 therein.
8

9 **f. Requirements that Do Not Apply**
10

11 The following requirements of 40 CFR 51.900(f) apply to serious, severe, and extreme ozone
12 nonattainment areas. They do not apply to the Salt Lake/Davis County area because it was
13 originally designated as a moderate nonattainment area. Thus, the anti-backsliding provisions do
14 not apply.
15

- 16 • Stage II Vapor Recovery
- 17
- 18 • Clean Fuels Fleet Program under § 182(e)(3) of the CAA
- 19
- 20 • Clean fuels for boilers under § 182(e)(3) of the CAA
- 21
- 22 • Transportation Control Measures (TCMs) during heavy traffic hours as
23 provided under § 182(e)(4) of the CAA
- 24
- 25 • Enhanced (ambient) monitoring under § 182(c)(1) of the CAA
- 26
- 27 • Transportation controls under §182(c)(5) of the CAA
- 28
- 29 • Vehicle miles traveled provisions under §182(d)(1) of the CAA
- 30

31 **g. Control Measure Carried Forward from the 1-hour**
32 **Ozone Plan**
33

34 The employer-based trip reduction program is included in the 1-hour maintenance plan, though
35 no credit is claimed, to reduce measurable miles driven by employees commuting to and from
36 work. It emphasizes numerous measures to reduce the drive-alone rate, including subsidized bus
37 passes, carpooling, telecommuting, and flexible work schedules. R307-320 is the State rule that
38 implements this program for all Federal, State and local government agencies in Salt Lake and
39 Davis Counties with 100 or more employees at a worksite. This program is used by government
40 agencies including public universities and school districts. It has proven to be a popular program
41 and is retained as a control measure in this 8-hour plan.
42

6. Contingency Measures

Requirements relating to Contingency Planning:

- *The State must develop a contingency plan that, at a minimum, will ensure that any violation of the 8-hour ozone NAAQS is promptly corrected. The plan should clearly identify the measures to be adopted, a schedule and procedure for adoption and implementation, and a specific time limit for action by the State. The schedule for adoption and implementation should be as expeditious as possible, but no longer than twenty-four months.*

a. Purpose of Contingency Planning

Section 110(a)(1) of the CAA and 40 CFR Part 51, *Requirements For Preparation, Adoption, and Submittal of Implementation Plans*, Subpart X, require the State to develop a maintenance plan that contains contingency provisions to ensure that any violation of the ozone NAAQS that may occur in the Salt Lake/Davis County area will be promptly corrected. Under the current 8-hour NAAQS, attainment areas are not necessarily required to have pre-selected contingency provisions, but rather a listing of measures that could be considered for future implementation, should they become necessary. The purpose of these controls in attainment areas is to achieve sufficient VOC and/or NO_x emission reductions to eliminate ozone violations, or to offset increases in VOC or NO_x emissions that might threaten the ozone standard. Implementing controls in response to ozone violations in attainment areas may occur without federal redesignation of an area to non-attainment.

When considering potential control measures, several factors were taken into consideration. Some controls interact with other controls, thereby decreasing overall effectiveness. For example, in the case of NO_x emissions, it has been found that reducing them under certain conditions may actually increase the development of ozone because NO_x can function as a scavenger of ozone. Major considerations that need to be considered in the choosing of viable control strategies are cost effectiveness, actual realized reductions with minimal lead time, and the overall benefit of the controls.

b. [Determination of the Contingency Trigger Level and Date] When Will Contingency Measures be Needed?

~~[It is the intent of t]~~ The DAQ ~~[to]~~ will periodically review the ambient monitoring data, emission inventories, growth projections, and other relevant data to determine whether contingency measures delineated in this plan should be implemented to maintain the 8-hour ozone standard. The Air Quality Board currently reviews monthly monitoring data at regularly scheduled meetings. As in the past, the AQB may implement contingency measures proactively to avoid a violation. In 1999, the board implemented a number of voluntary measures and state-only rules that helped the area to attain the 8-hour standard and be designated attainment.

If monitoring values are high enough to cause a violation of the current ozone standard, the DAQ, in consultation with EPA, will evaluate contingency measures and recommend those measures that would be most effective to correct the exceedance to the AQB. ~~[An action by the AQB will~~

1 function as the official triggering mechanism to activate any control measure. The date that the
2 AQB determines that one or more contingency or control measures should be implemented will
3 be the contingency trigger date.]
4

5 **c. ~~[Timeliness of Contingency Actions]~~Schedule**

6

7 The maintenance plan must ~~[also]~~ ensure that the contingency provisions are adopted
8 expeditiously once a need is determined. The State will normally have an appropriate amount of
9 time to correct a violation by implementing one or more of the contingency measures as
10 necessary. In the event that violations continue to occur after contingency measures have been
11 implemented, additional contingency measures would be implemented until the violations are
12 corrected and the area has returned to ambient concentration levels meeting the NAAQS.
13

14 ~~[As specified in (b) above, t]~~ The date that certified data shows that a monitored violation has
15 occurred ~~[the AQB determines that one or more contingency measures should be implemented]~~
16 will be considered the contingency trigger date. Within 60 days of the contingency trigger date,
17 DAQ will begin evaluation of potential contingency measures. Within 180 days of the trigger
18 date, DAQ will present the recommended contingency measures to the AQB. The AQB will then
19 direct public hearings to consider the recommended contingency measures along with any other
20 contingency measures the Board believes may be appropriate to effectively address the problem.
21 ~~[Unless otherwise directed]~~ Unless a shorter period is prescribed, the necessary contingency
22 measures will be adopted and implemented within ~~[eighteen]~~ 24 months of the trigger date.
23

24 **d. Possible Contingency Measures**

25

26 One or more of the following measures will be evaluated for implementation if the conditions in
27 Subsection b. above occur. Measures will be chosen based on the specific needs of the violating
28 area, and their capacity to bring the area back into compliance quickly. It is likely that no federal
29 money will be available to fund the implementation of the selected control measures. Most, if not
30 all, of the costs involved will be assumed by local citizens, local industries, and state government
31 agencies. These control measures are not listed in any order of preference.
32

- 33 • *Alert Day Enhancements* - DAQ could expand the “Choose Clean Air” campaign, a
34 program designed to help individuals improve air quality by making smart choices.
35 The program would discourage the refueling of on-road vehicles during peak periods
36 of ozone formation by creating incentives to refuel later in the day. The program
37 would also include a voluntary restriction of the use of gasoline powered small
38 engines during the hottest period of the day.
39
- 40 • *Reduction of Truck Stop Idling* - This is a strategy that has been suggested at the
41 national level as a major environmental and energy issue. Truckers often stop to rest,
42 but leave their engines running for a variety of reasons. The US Department of
43 Energy is considering a model rule that would set uniform idling standards by
44 encouraging truck stop electrification. This would allow truck drivers to “plug in” to
45 keep accessories going while shutting down their engines. Utah could adopt a rule
46 limiting vehicle idling time while vehicles are not actually moving. This could
47 significantly reduce the amount of several criteria pollutants being released to the
48 atmosphere and at the same time reduce fuel waste.
49

- 1 • *Heavy Equipment Emission Control Program* - Institute an emission reduction
2 program for heavy construction equipment, school busses, and Utah Transit
3 Authority (UTA) vehicles. This could include incentives to encourage after-market
4 retrofit of heavy-duty diesel construction equipment and increased use of compressed
5 natural gas fueled school and UTA busses.
6
- 7 • *Reduce Emissions of VOCs* - Request voluntary commitments or enact regulatory
8 measures to reduce or restrict the release of VOCs from major sources~~[-during~~
9 ~~periods of peak ozone formation]~~. This could include industrial sources both within
10 and outside the ozone maintenance area whose pollutants may be transported into the
11 maintenance area by local wind patterns or meteorological processes. This could also
12 include refineries, waste water treatment facilities, chemical plants, and large
13 painting operations that emit most of their pollutants or precursors during the hottest
14 time of the day. New CTGs and ACTs may be adopted to reduce emissions of VOC
15 in the maintenance area.
16
- 17 • *Identification of High-Polluting Vehicles* - Use remote sensing technology to identify
18 smoking and high-emitting vehicles that contribute a disproportionate amount of
19 emissions. This technology is available and was recently used in Cache County to
20 identify high polluting vehicles during the winter inversion season. Provide a monetary
21 incentive program to encourage repair of these vehicles at participating repair shops.
22
- 23 • *Establish an Offset Ratio for NO_x* - R307-420 maintains the offset provisions of the
24 new source review program in Salt Lake and Davis Counties. This offset program
25 addresses growth in ozone precursors that are not adequately addressed in the current
26 models used for permitting under the Prevention of Significant Deterioration (PSD)
27 program. In 1999 the emissions thresholds were lowered for VOC. The thresholds
28 could be lowered for NO_x to further limit NO_x from new sources.
29
- 30 • *Implement More Effective Low-NO_x Burner Controls* – Existing sources in Salt Lake and
31 Davis Counties could be required to replace existing burners with low-NO_x burners.
32
- 33 • Other VOC or NO_x emission control measures appropriate for the area based on
34 consideration of cost-effectiveness, emission reduction potential, social and
35 economic considerations, or other factors that the AQB may deem appropriate. It is
36 understood that new control measures may be developed in the future that could have
37 large impacts on emissions.
38

39 The choice of contingency measures will be affected by the severity of the violation, overall air
40 quality trends, and expected emission reductions from new state or federal requirements. For
41 example, if ozone levels are steadily worsening, the Board may choose to implement broad
42 regulatory measures to reverse the trend. On the other hand, if the ozone levels are slightly above
43 the standard and significant emission reductions are expected to occur within the next few years,
44 such as Tier II automobile standards, the Board may choose to focus on voluntary measures that
45 could be implemented immediately to bridge the gap until those reductions were achieved. If
46 voluntary measures are implemented, the State will use EPA guidance on incorporating voluntary
47 measures into a SIP to ensure that the measures are quantified and that emission reductions are
48 measured. Any shortfall in the estimated emission reduction will be remedied in a timely manner
49 if needed to maintain the 8-hour standard.

1 **7. Verification of Continued Ozone Maintenance**

2
3 *Requirements relating to Verification of Continued Attainment:*

4
5 - *The Maintenance Plan should indicate how the state will track the progress of*
6 *the Maintenance Plan.*

7
8 **a. Tracking System for the Verification of the Emission**
9 **Inventory**

10
11 Continued maintenance of the 8-hour ozone standard in Salt Lake and Davis Counties depends
12 upon the ability of the State to track VOC and NO_x emissions in future years. This is necessary
13 due to the fact that emissions projections made for the maintenance demonstration included in
14 this plan depend on assumptions of point, area, and mobile source growth. To verify continued
15 maintenance, the State will ~~[periodically]~~ update the VOC and NO_x emission inventories for Salt
16 Lake and Davis Counties at least once every three years. This updated emission inventory will be
17 compared to the projections contained in this plan to verify that they are within acceptable limits
18 to maintain the ozone standard.

19
20 **b. Provisions for Revising the Maintenance Plan**

21
22 As stipulated in Section 110(a)(2)(H) of the CAA, the State agrees to provide for review of this
23 maintenance plan and submission of a revised maintenance plan, if necessary. ~~[It is understood~~
24 ~~that maintenance plans approved under section 110(a)(1) remain in effect for 10 years and are not~~
25 ~~required to be adopted for a second ten year period. It is further understood that contingency~~
26 ~~measures approved as part of 110(a)(1) maintenance plans will remain in effect and that the~~
27 ~~contingency measures could still be triggered if an area violates the 8-hour standard after the~~
28 ~~initial 10-year period.] It is understood that maintenance plans approved under Section 110(a)(1)~~
29 ~~remain in effect until amended or repealed. It is further understood that contingency measures~~
30 ~~approved as part of 110(a)(1) maintenance plans will remain in effect and that they could still be~~
31 ~~triggered if an area violates the 8-hour standard after 2014.~~

32
33 **c. Provisions for Prohibiting Transport of Emissions to**
34 **Other States**

35
36 If it is determined that emissions generated within the State of Utah interfere with attainment or
37 maintenance of a NAAQS in another state, DAQ will take steps, as necessary, to reduce those
38 emissions.

Original Proposal for R307-110-13

(4) Is otherwise in compliance with the requirements of the Clean Air Act. [

~~"Reactor" means any vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.]~~

"Reasonable Further Progress" means annual incremental reductions in emission of an air pollutant which are sufficient to provide for attainment of the NAAQS by the date identified in the State Implementation Plan.

.....

"Significant" means:

(1) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Carbon monoxide: 100 ton per year (tpy);

Nitrogen oxides: 40 tpy;

Sulfur dioxide: 40 tpy;

PM10: 15 tpy;

Particulate matter: 25 tpy;

Ozone: 40 tpy of volatile organic compounds;

Lead: 0.6 tpy.

"Solid Fuel" means wood, coal, and other similar organic material or combination of these materials.

"Solvent" means organic materials which are liquid at standard conditions (Standard Temperature and Pressure) and which are used as dissolvers, viscosity reducers, or cleaning agents.

"Source" means any structure, building, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act and which is located on one or more continuous or adjacent properties and which is under the control of the same person or persons under common control. A building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (US Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).

"Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

"Standards of Performance for New Stationary Sources" means the Federally established requirements for performance and record keeping (Title 40 Code of Federal Regulations, Part 60).

"State" means Utah State. [

~~"Synthesized Pharmaceutical Manufacturing" means the manufacture of pharmaceutical products by chemical synthesis.]~~

"Temporary" means not more than 180 calendar days.

"Temporary Clean Coal Technology Demonstration Project" means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the Utah State Implementation Plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

"Threshold Limit Value - Ceiling (TLV-C)" means the airborne concentration of a substance which may not be exceeded, as adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Threshold Limit Value - Time Weighted Average (TLV-TWA)" means the time-weighted airborne concentration of a substance adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Total Suspended Particulate (TSP)" means minute separate particles of matter, collected by high volume sampler.

"Toxic Screening Level" means an ambient concentration of an air contaminant equal to a threshold limit value - ceiling (TLV-C) or threshold limit value-time weighted average (TLV-TWA) divided by a safety factor.

"Trash" means solids not considered to be highly flammable or explosive including, but not limited to clothing, rags, leather, plastic, rubber, floor coverings, excelsior, tree leaves, yard trimmings and other similar materials.

"Volatile Organic Compound (VOC)" as defined in 40 CFR 51.100(s)(1), as effective on July 1, 2004, and amended on November 29, 2004, by 69 FR 69290 and 69 FR 69298, is hereby adopted and incorporated by reference.

"Waste" means all solid, liquid or gaseous material, including, but not limited to, garbage, trash, household refuse, construction or demolition debris, or other refuse including that resulting from the prosecution of any business, trade or industry.

"Zero Drift" means the change in the instrument meter readout over a stated period of time of normal continuous operation when the VOC concentration at the time of measurement is zero.

KEY: air pollution, definitions

Date of Enactment or Last Substantive Amendment: [September 8, 2005] 2006

Notice of Continuation: June 16, 2006

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

Environmental Quality, Air Quality R307-110-13 Section IX, Control Measures for Area and Point Sources, Part D, Ozone

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE NO.: 29001

FILED: 09/07/2006, 16:05

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to incorporate by reference the new Section IX.D of the state implementation plan (SIP) (ozone eight-hour maintenance plan) in Section R307-110-13, which replaces the current one-hour ozone maintenance plan and the current one-hour ozone SIP. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Section R307-101-2; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Section R307-101-2 (DAR No. 29000); and Rules R307-320 (DAR No.

29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: This amendment revises Section R307-110-13 by replacing Section IX.D of the SIP that is incorporated by reference by Section R307-110-13. There are several important changes in the eight-hour maintenance plan. The following is a list of major differences between this draft plan and the existing one-hour maintenance plan: 1) the previous one-hour maintenance plan established a mobile source budget for purposes of transportation conformity. When the one-hour standard was revoked, effective June 15, 2005, transportation conformity no longer applied. Therefore, the mobile source budgets for Salt Lake and Davis Counties are not included in this plan and the Wasatch Front Regional Council is not required to demonstrate conformity with the mobile source inventory that is included in this plan; 2) the previous plan included a case-by-case volatile organic compound (VOC) reasonably available control technology (RACT) determination for Hill Air Force Base (Hill) and Olympia Sales. The intent of that determination was to demonstrate that current operations at these two sources were RACT, and that any future changes would be covered by the new source review (NSR) program. The Environmental Protection Agency (EPA) interpreted this SIP provision in a more stringent manner than intended, and considered every provision in the applicable approval orders to be a SIP condition. To resolve this unworkable interpretation, the Division of Air Quality (DAQ) has worked with Hill to develop a new RACT determination for Hill to reflect underlying standards such as Utah's RACT rules and federal maximum achievable control technology (MACT) standards. Because the MACT standards were implemented since the previous one-hour maintenance plan was adopted, the overall RACT level will now be more stringent than what was considered RACT in the mid-1990s; 3) when the one-hour ozone maintenance plan was originally adopted in 1993, EPA required Utah to include contingency measures that were already adopted and could be implemented quickly. It was later discovered that the contingency measures did not need to be adopted, but could be identified as potential contingency measures that could be evaluated and adopted within a reasonable time period after an ozone violation occurred. In this eight-hour maintenance plan, a list of possible contingency measures is included. However, DAQ is recommending deleting the pre-approved rules for Stage II Vapor Recovery and several other contingencies because if and when they may be triggered in the future, those contingencies that are implemented will be selected based on information available at that time; 4) the Inspection and Maintenance Program performance standards for Salt Lake and Davis Counties are reestablished using EPA MOBILE6 software and the target years have been extended through 2014; and 5) the old one-hour maintenance plan in Section IX.D.1 of the SIP is deleted. This plan was adopted in the early 1980s and is no longer applicable because it was

developed to attain the one-hour ozone standard. This plan was developed according to current EPA guidance and demonstrates that Salt Lake and Davis Counties will remain in compliance to the Ozone National Ambient Air Quality Standards (NAAQS) through 2014. The proposed maintenance plan is available at: http://www.airquality.utah.gov/Public-Interest/Current-Issues/ozone_maintenance/index.htm.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(3)(e)

THIS RULE OR CHANGE INCORPORATES BY REFERENCE THE FOLLOWING MATERIAL: State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part D, Ozone Maintenance Provisions for Salt Lake and Davis Counties

ANTICIPATED COST OR SAVINGS TO:

- ❖ **THE STATE BUDGET:** Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ **LOCAL GOVERNMENTS:** Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ **OTHER PERSONS:** Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Jan Miller or Mat E. Carlile at the above address, by phone at 801-536-4042 or 801-536-4136, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at janmiller@utah.gov or MCARLILE@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-110. General Requirements: State Implementation Plan.

R307-110-13. Section IX, Control Measures for Area and Point Sources, Part D, Ozone.

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part D, Ozone, as most recently amended by the Utah Air Quality Board on ~~[September 9, 1998]~~ December 6, 2006, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

KEY: air pollution, PM10, PM2.5, ozone

Date of Enactment or Last Substantive Amendment: ~~[June 16, 2006]~~

Notice of Continuation: June 16, 2006

Authorizing, and Implemented or Interpreted Law: 19-2-104(3)(e)

Environmental Quality, Air Quality

R307-320

**Davis, Salt Lake and Utah Counties,
and Ogden City: Employer-Based Trip
Reduction Program**

NOTICE OF PROPOSED RULE

(Amendment)

DAR File No.: 29002

FILED: 09/07/2006, 16:05

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify Rule R307-320 by adding language to align the rule with the new ozone maintenance plan and making other grammatical corrections throughout Rule R307-320 to improve the readability of the rule. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13, and Rules R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) In addition, language that would trigger Rule R307-320 as a contingency measure for the PM10 State Implementation Plan (SIP) was removed because the Trip Reduction Program is no longer listed as a contingency measure in the PM10 Maintenance Plan. (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-320 to improve the readability of the rule. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above). In addition, language that would trigger Rule R307-320 as a contingency measure for the PM10 SIP was removed because the Trip Reduction Program is no longer listed as a contingency measure in the PM10 Maintenance Plan.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(h)

ANTICIPATED COST OR SAVINGS TO:

❖ **THE STATE BUDGET:** Because these revisions do not create any new requirements, no change in costs is expected to the state budget.

❖ **LOCAL GOVERNMENTS:** Because these revisions do not create any new requirements, no change in costs is expected for local governments.

❖ **OTHER PERSONS:** Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nelson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY

AIR QUALITY

150 N 1950 W

SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

Change to Proposed Rule R307-110-13

R307. Environmental Quality, Air Quality.

R307-110. General Requirements: State Implementation Plan.

R307-110-13. Section IX, Control Measures for Area and Point Sources, Part D, Ozone.

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part D, Ozone, as most recently amended by the Utah Air Quality Board on ~~[December 6, 2006]~~January 3, 2007, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

KEY: air pollution, PM10, PM2.5, ozone

Date of Enactment or Last Substantive Amendment: ~~[2006]~~2007

Notice of Continuation: June 16, 2006

Authorizing, and Implemented or Interpreted Law: 19-2-104(3)(e)

Original Proposal for R307-101-2

R277-616-5. School District Funding for Homeless Students and Economically Disadvantaged Ethnic Minority Students.

A. Funds appropriated for homeless and economically disadvantaged ethnic minority students shall be distributed as outlined under 53A-17a-121(4)(3).

B. For purposes of determining the homeless student count, a district[s] or a charter school shall count annually the number of homeless students served in the district or charter school.

C. If a student satisfies the homeless criteria at more than one time during the school year in the same district or charter school, the student shall be counted once.

KEY: compulsory education, students' rights

Date of Enactment or Last Substantive Amendment: (July 2, 1998) 2006

Notice of Continuation: November 23, 2005

Authorizing, and Implemented or Interpreted Law: Art X Sec 3; 53A-1-401(3); 53A-2-201(3)(5); 53A-2-202; 53A-17a-121(4)(3)

amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-2-104

ANTICIPATED COST OR SAVINGS TO:

❖ **THE STATE BUDGET:** Because these revisions do not create any new requirements, no change in costs is expected to the state budget.

❖ **LOCAL GOVERNMENTS:** Because these revisions do not create any new requirements, no change in costs is expected for local governments.

❖ **OTHER PERSONS:** Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Jan Miller or Mat E. Carlile at the above address, by phone at 801-536-4042 or 801-536-4136, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at janmiller@utah.gov or MCARLILE@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-101. General Requirements.

R307-101-2. Definitions.

Except where specified in individual rules, definitions in R307-101-2 are applicable to all rules adopted by the Air Quality Board.

**Environmental Quality, Air Quality
R307-101-2
Definitions**

NOTICE OF PROPOSED RULE

(Amendment)

DAR File No.: 29000

FILED: 09/07/2006, 16:04

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This amendment moves one definition, deletes other unused definitions, and modifies another definition. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Section R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Section R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: Several definitions are deleted because they are no longer used in any rules. In addition, the definition for "Maintenance Area" is revised to include the date when Provo City was redesignated to attainment for carbon monoxide. A correction is also made to clarify that the eastern portion of Tooele County will not be considered a maintenance area for sulfur dioxide (SO₂) until the SO₂ maintenance plan has been approved by the Environmental Protection Agency. Also, the definition of "Asphalt or Asphalt Cement" is moved to Rule R307-341 because it is the only rule that uses this definition. This

"Actual Emissions" means the actual rate of emissions of a pollutant from an emissions unit determined as follows:

(1) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operations. The Executive Secretary shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(2) The Executive Secretary may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(3) For any emission unit, other than an electric utility steam generating unit specified in (4), which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(4) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the executive secretary, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the executive secretary if the executive secretary determines such a period to be more representative of normal source post-change operations.

"Acute Hazardous Air Pollutant" means any noncarcinogenic hazardous air pollutant for which a threshold limit value - ceiling (TLV-C) has been adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Air Contaminant" means any particulate matter or any gas, vapor, suspended solid or any combination of them, excluding steam and water vapors (Section 19-2-102(1)).

"Air Contaminant Source" means any and all sources of emission of air contaminants whether privately or publicly owned or operated (Section 19-2-102(2)).

"Air Pollution" means the presence in the ambient air of one or more air contaminants in such quantities and duration and under conditions and circumstances, as is or tends to be injurious to human health or welfare, animal or plant life, or property, or would unreasonably interfere with the enjoyment of life or use of property as determined by the standards, rules and regulations adopted by the Air Quality Board (Section 19-2-104).

"Allowable Emissions" means the emission rate of a source calculated using the maximum rated capacity of the source (unless the source is subject to enforceable limits which restrict the operating rate, or hours of operation, or both) and the emission limitation established pursuant to R307-401-8.

"Ambient Air" means the surrounding or outside air (Section 19-2-102(4)).

"Appropriate Authority" means the governing body of any city, town or county.

~~"Asphalt or Asphalt Cement" means the dark brown to black cementitious material (solid, semisolid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.]~~

"Atmosphere" means the air that envelops or surrounds the earth and includes all space outside of buildings, stacks or exterior ducts.

.....

"Hazardous Air Pollutant (HAP)" means any pollutant listed by the EPA as a hazardous air pollutant in conformance with Section 112(b) of the Clean Air Act. A list of these pollutants is available at the Division of Air Quality.]

~~"Heavy Fuel Oil" means a petroleum product or similar material with a boiling range higher than that of diesel fuel.]~~

"Household Waste" means any solid or liquid material normally generated by the family in a residence in the course of ordinary day-to-day living, including but not limited to garbage, paper products, rags, leaves and garden trash.

"Incinerator" means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid, or gaseous combustible wastes are ignited and burned efficiently and from which the solid and gaseous residues contain little or no combustible material.

"Installation" means a discrete process with identifiable emissions which may be part of a larger industrial plant. Pollution equipment shall not be considered a separate installation or installations.

"LPG" means liquified petroleum gas such as propane or butane.

"Maintenance Area" means an area that is subject to the provisions of a maintenance plan that is included in the Utah state implementation plan, and that has been redesignated by EPA from nonattainment to attainment of any National Ambient Air Quality Standard.

(a) The following areas are considered maintenance areas for ozone:

- (i) Salt Lake County, effective August 18, 1997; and
- (ii) Davis County, effective August 18, 1997.

(b) The following areas are considered maintenance areas for carbon monoxide:

- (i) Salt Lake City, effective March 22, 1999;
- (ii) Ogden City, effective May 8, 2001; and
- (iii) Provo City, effective [on the date that EPA approves the

~~maintenance plan that was adopted by the Board on March 31, 2004] January 3, 2006.~~

(c) The following areas are considered maintenance areas for PM10:

- (i) Salt Lake County, effective on the date that EPA approves the maintenance plan that was adopted by the Board on July 6, 2005; and
- (ii) Utah County, effective on the date that EPA approves the maintenance plan that was adopted by the Board on July 6, 2005; and
- (iii) Ogden City, effective on the date that EPA approves the maintenance plan that was adopted by the Board on July 6, 2005.

(d) The following area[s] ~~are~~ is considered a maintenance area[s] for sulfur dioxide:]

- ~~(i) Salt Lake County and the eastern portion of Tooele County above 5600 feet, effective on the date that EPA approves the maintenance plan that was adopted by the Board on January 5, 2005; and~~

~~(ii) the eastern portion of Tooele County above 5600 feet].~~

"Major Modification" means any physical change in or change in the method of operation of a major source that would result in a significant net emissions increase of any pollutant. A net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone. Within Salt Lake and Davis Counties or any nonattainment area for ozone, a net emissions increase that is significant for nitrogen oxides shall be considered significant for ozone.

Within areas of nonattainment for PM10, a significant net emission increase for any PM10 precursor is also a significant net emission increase for PM10. A physical change or change in the method of operation shall not include:

- (1) routine maintenance, repair and replacement;
- (2) use of an alternative fuel or raw material by reason of an order under section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (3) use of an alternative fuel by reason of an order or rule under section 125 of the federal Clean Air Act;
- (4) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- (5) use of an alternative fuel or raw material by a source:
 - (a) which the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any enforceable permit condition; or
 - (b) which the source is otherwise approved to use;
- (6) an increase in the hours of operation or in the production rate unless such change would be prohibited under any enforceable permit condition;
- (7) any change in ownership at a source
- (8) the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the executive secretary determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except:
 - (a) when the executive secretary has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I of the Clean Air Act, if any, and
 - (b) the executive secretary determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation.
- (9) the installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
 - (a) the Utah State Implementation Plan; and
 - (b) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

.....

"PSD" Area means an area designated as attainment or unclassifiable under section 107(d)(1)(D) or (E) of the federal Clean Air Act.

"PM10" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by an EPA reference or equivalent method.

"PM10 Precursor" means any chemical compound or substance which, after it has been emitted into the atmosphere, undergoes chemical or physical changes that convert it into particulate matter, specifically PM10.

"Part 70 Source" means any source subject to the permitting requirements of R307-415. [

~~"Peak Ozone Season" means June 1 through August 31, inclusive.]~~

"Person" means an individual, trust, firm, estate, company, corporation, partnership, association, state, state or federal agency or

entity, municipality, commission, or political subdivision of a state. (Subsection 19-2-103(4)).

"Pollution Control Project" means any activity or project at an existing electric utility steam generating unit for purposes of reducing emissions from such unit. Such activities or projects are limited to:

(1) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;

(2) An activity or project to accommodate switching to a fuel which is less polluting than the fuel used prior to the activity or project, including, but not limited to natural gas or coal reburning, or the cofiring of natural gas and other fuels for the purpose of controlling emissions;

(3) A permanent clean coal technology demonstration project conducted under Title II, sec. 101(d) of the Further Continuing Appropriations Act of 1985 (sec. 5903(d) of title 42 of the United States Code), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency; or

(4) A permanent clean coal technology demonstration project that constitutes a repowering project.

"Potential to Emit" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

"Process Level" means the operation of a source, specific to the kind or type of fuel, input material, or mode of operation.

"Process Rate" means the quantity per unit of time of any raw material or process intermediate consumed, or product generated, through the use of any equipment, source operation, or control apparatus. For a stationary internal combustion unit or any other fuel burning equipment, this term may be expressed as the quantity of fuel burned per unit of time. [

~~"Production Equipment Exhaust System" means a device for collecting and directing out of the work area VOC fugitive emissions from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting employees from excessive VOC exposure.]~~

"Reactivation of a Very Clean Coal-Fired Electric Utility Steam Generating Unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the emission inventory at the time of enactment;

(2) Was equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(3) Is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and

(4) Is otherwise in compliance with the requirements of the Clean Air Act. [

~~"Reactor" means any vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.]~~

"Reasonable Further Progress" means annual incremental reductions in emission of an air pollutant which are sufficient to provide for attainment of the NAAQS by the date identified in the State Implementation Plan.

.....

"Significant" means:

(1) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Carbon monoxide: 100 ton per year (tpy);

Nitrogen oxides: 40 tpy;

Sulfur dioxide: 40 tpy;

PM10: 15 tpy;

Particulate matter: 25 tpy;

Ozone: 40 tpy of volatile organic compounds;

Lead: 0.6 tpy.

"Solid Fuel" means wood, coal, and other similar organic material or combination of these materials.

"Solvent" means organic materials which are liquid at standard conditions (Standard Temperature and Pressure) and which are used as dissolvers, viscosity reducers, or cleaning agents.

"Source" means any structure, building, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act and which is located on one or more continuous or adjacent properties and which is under the control of the same person or persons under common control. A building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (US Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).

"Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

"Standards of Performance for New Stationary Sources" means the Federally established requirements for performance and record keeping (Title 40 Code of Federal Regulations, Part 60).

"State" means Utah State. [

~~"Synthesized Pharmaceutical Manufacturing" means the manufacture of pharmaceutical products by chemical synthesis.]~~

"Temporary" means not more than 180 calendar days.

"Temporary Clean Coal Technology Demonstration Project" means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the Utah State Implementation Plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

"Threshold Limit Value - Ceiling (TLV-C)" means the airborne concentration of a substance which may not be exceeded, as adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Threshold Limit Value - Time Weighted Average (TLV-TWA)" means the time-weighted airborne concentration of a substance adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Total Suspended Particulate (TSP)" means minute separate particles of matter, collected by high volume sampler.

"Toxic Screening Level" means an ambient concentration of an air contaminant equal to a threshold limit value - ceiling (TLV-C) or threshold limit value-time weighted average (TLV-TWA) divided by a safety factor.

"Trash" means solids not considered to be highly flammable or explosive including, but not limited to clothing, rags, leather, plastic, rubber, floor coverings, excelsior, tree leaves, yard trimmings and other similar materials.

"Volatile Organic Compound (VOC)" as defined in 40 CFR 51.100(s)(1), as effective on July 1, 2004, and amended on November 29, 2004, by 69 FR 69290 and 69 FR 69298, is hereby adopted and incorporated by reference.

"Waste" means all solid, liquid or gaseous material, including, but not limited to, garbage, trash, household refuse, construction or demolition debris, or other refuse including that resulting from the prosecution of any business, trade or industry.

"Zero Drift" means the change in the instrument meter readout over a stated period of time of normal continuous operation when the VOC concentration at the time of measurement is zero.

KEY: air pollution, definitions

Date of Enactment or Last Substantive Amendment: [September 8, 2005] 2006

Notice of Continuation: June 16, 2006

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

Environmental Quality, Air Quality

R307-110-13

Section IX, Control Measures for Area and Point Sources, Part D, Ozone

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE No.: 29001

FILED: 09/07/2006, 16:05

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to incorporate by reference the new Section IX.D of the state implementation plan (SIP) (ozone eight-hour maintenance plan) in Section R307-110-13, which replaces the current one-hour ozone maintenance plan and the current one-hour ozone SIP. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Section R307-101-2; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Section R307-101-2 (DAR No. 29000); and Rules R307-320 (DAR No.

Change to Proposed Rule R307-101-2

R307. Environmental Quality, Air Quality.**R307-101. General Requirements.****R307-101-2. Definitions.**

...
"Installation" means a discrete process with identifiable emissions which may be part of a larger industrial plant. Pollution equipment shall not be considered a separate installation or installations.

"LPG" means liquified petroleum gas such as propane or butane.

"Maintenance Area" means an area that is subject to the provisions of a maintenance plan that is included in the Utah state implementation plan, and that has been redesignated by EPA from nonattainment to attainment of any National Ambient Air Quality Standard.

(a) The following areas are considered maintenance areas for ozone:

(i) Salt Lake County, effective August 18, 1997; and

(ii) Davis County, effective August 18, 1997.

(b) The following areas are considered maintenance areas for carbon monoxide:

(i) Salt Lake City, effective March 22, 1999;

(ii) Ogden City, effective May 8, 2001; and

(iii) Provo City, effective January 3, 2006.

(c) The following areas are considered maintenance areas for PM10:

(i) Salt Lake County, effective on the date that EPA approves the maintenance plan that was adopted by the Board on July 6, 2005; and

(ii) Utah County, effective on the date that EPA approves the maintenance plan that was adopted by the Board on July 6, 2005; and

(iii) Ogden City, effective on the date that EPA approves the maintenance plan that was adopted by the Board on July 6, 2005.

(d) The following area is considered a maintenance area for sulfur dioxide: all of Salt Lake County and the eastern portion of Tooele County above 5600 feet, effective on the date that EPA approves the maintenance plan that was adopted by the Board on January 5, 2005.

"Major Modification" means any physical change in or change in the method of operation of a major source that would result in a significant net emissions increase of any pollutant. A net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone. Within Salt Lake and Davis Counties or any nonattainment area for ozone, a net emissions increase that is significant for nitrogen oxides shall be considered significant for ozone. Within areas of nonattainment for PM10, a significant net emission increase for any PM10 precursor is also a significant net emission increase for PM10. A physical change or change in the method of operation shall not include:

1 ...

2
3 **KEY: air pollution, definitions**

4 **Date of Enactment or Last Substantive Amendment: 200[~~6~~]7**

5 **Notice of Continuation: June 16, 2006**

6 **Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)**

7
8

Original Proposal for R307-320

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-110. General Requirements: State Implementation Plan.

R307-110-13. Section IX, Control Measures for Area and Point Sources, Part D, Ozone.

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part D, Ozone, as most recently amended by the Utah Air Quality Board on ~~September 9, 1998~~ December 6, 2006, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

KEY: air pollution, PM10, PM2.5, ozone

Date of Enactment or Last Substantive Amendment: ~~June 16, 2006~~

Notice of Continuation: June 16, 2006

Authorizing, and Implemented or Interpreted Law: 19-2-104(3)(e)

**Environmental Quality, Air Quality
R307-320**

**Davis, Salt Lake and Utah Counties,
and Ogden City: Employer-Based Trip
Reduction Program**

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE NO.: 29002

FILED: 09/07/2006, 16:05

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify Rule R307-320 by adding language to align the rule with the new ozone maintenance plan and making other grammatical corrections throughout Rule R307-320 to improve the readability of the rule. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) In addition, language that would trigger Rule R307-320 as a contingency measure for the PM10 State Implementation Plan (SIP) was removed because the Trip Reduction Program is no longer listed as a contingency measure in the PM10 Maintenance Plan. (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-320 to improve the readability of the rule. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above). In addition, language that would trigger Rule R307-320 as a contingency measure for the PM10 SIP was removed because the Trip Reduction Program is no longer listed as a contingency measure in the PM10 Maintenance Plan.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(h)

ANTICIPATED COST OR SAVINGS TO:

- ❖ **THE STATE BUDGET:** Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ **LOCAL GOVERNMENTS:** Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ **OTHER PERSONS:** Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY

AIR QUALITY

150 N 1950 W

SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.**R307-320. ~~[Davis, Salt Lake and Utah Counties,] Ozone Maintenance Areas and Ogden City: Employer-Based Trip Reduction Program.~~****R307-320-1. Purpose.**

The purpose of this program is to reduce the number of measurable vehicle miles driven by employees commuting to and from work by requiring employers with work sites within ~~[Davis and Salt Lake Counties] ozone maintenance areas~~ to implement strategies designed to reduce the employee drive-alone rate. ~~[Under the authority of 19-2-104(1)(h) and (2), a]~~ An employer-based trip reduction program is authorized under 19-2-104(1)(h) and (2). It is a state implementation plan control strategy to reduce ambient ~~[measures of air pollution] ozone and is a potential contingency measure for carbon monoxide~~. An added benefit of the program is reducing the number of cars on increasingly congested roadways.

R307-320-2. Applicability.

(1) R307-320 applies to any federal, state, or local entity, or any other public department, district (including public universities and public school districts), or agency in Davis or Salt Lake County.

~~(2) [If the Contingency Requirements for fine particulate are triggered as outlined in Section IX.A.8.b of the State Implementation Plan, R307-320 applies to any federal, state, or local entity, or any other public department, district (including public universities and public school districts), or agency in Utah County.]~~

~~(3) If the [C]ontingency [R]equirements for carbon monoxide are triggered as outlined in Section IX.C.8.[h]f of the State Implementation Plan, R307-320 applies to any federal, state, or local entity, or any other public department, district (including public universities and public school districts), or agency in Ogden City.~~

R307-320-3. Definitions.

The following additional definitions apply to R307-320:

"Compressed Work Week" means any work schedule ~~[which] that~~ eliminates at least one commute trip to a work site in each two week period.

"Drive-alone Rate" means the number of single-occupancy vehicles divided by the sum of single-occupancy vehicles, plus employees using mass transit, ridesharing, biking, walking, telecommuting or having credit for a compressed work week. The drive-alone rate calculation must be based on a typical Monday through Friday work week.

Drive-alone Rate = single-occupancy vehicles / (single-occupancy vehicles + mass transit users + rideshare participants + bikers + walkers + telecommuters + credit for compressed work week).

"Employee" means any person including persons employed by public universities or school districts, who works at or reports to a single work site at least three days per week for at least six months of the year.

"Employee Transportation Coordinator" means a person assigned the responsibility of developing, implementing, monitoring, tracking, and marketing the trip reduction plan for the employer.

"Employer" means federal, state, or local entity, or any other public department, district (including public universities or public school districts), or agency.

"Peak Travel Period" means the period beginning at 6 a.m. and ending at 10 a.m., Mondays through Fridays.

"Ridesharing" means transportation of more than one person for commute purposes in a vehicle.

"Single-occupancy Vehicles" means vehicles traveling to the work site with a driver and no passengers during the peak travel period.

"Target Drive-alone Rate" means a twenty percent reduction in the drive alone rate based on the 1990 census data for modes of travel in each county. The target drive-alone rate schedule is as follows:

TABLE
TARGET DRIVE-ALONE RATE SCHEDULE

	Davis County Drive-Alone Rate	Salt Lake County Drive-Alone Rate
From 1990 Census Data	0.76	0.77
1st year interim target drive-alone rate	0.72	0.73
2nd year interim target drive-alone rate	0.68	0.69
3rd year interim target drive-alone rate	0.67	0.67
4th year interim target drive-alone rate	0.65	0.65
5th year interim target drive-alone rate	0.63	0.64
6th year interim target drive-alone rate	0.61	0.62
Target drive-alone rate	0.61	0.62

"Telecommuting" means working at home or at a satellite work site, provided the employee does not use a single-occupancy vehicle to travel to the satellite work site.

"Trip Reduction Plan" means a set of strategies designed to reduce the drive-alone rate.

"Vehicle" means motorcycles and on-road vehicles powered by a gasoline or diesel internal combustion engine with nine or less seating positions for adults.

"Work Site" means a building and any group of buildings ~~[which] that~~ are on physically contiguous parcels of land or on parcels separated solely by private or public roadways or rights-of-way.

R307-320-4. Employer Requirements.

(1) Each employer shall assign an employee trip reduction coordinator within 30 days after the effective date of R307-320.

(2) Each employer shall determine the drive-alone rate per work site on an annual basis for a typical Monday through Friday work week during the peak travel period. The drive-alone rate can be determined by one of the following methods in (a), (b) or (c) below.

(a) Information from an annual employee survey.

(i) The employer must use a standardized survey approved by the executive secretary. The survey shall ask the travel distance from the employee's home to the work site, what frequency and mode of transportation the employee used to get to work, and how often the employee participates in a telecommuting program or compressed work week schedule.

(ii) The employer shall administer the survey and shall capture, at a minimum, 75% of the employee population arriving at the work site during the peak travel period.

(b) Verifiable information, less than one year old of the submittal due date, from employer records including:

- (i) employee work schedules;
 - (ii) employee participation in telecommuting schedules;
 - (iii) employee participation of mass transit;
 - (iv) employee participation in rideshare arrangements; and
 - (v) employee participation in non-vehicular transit.
- (c) Another method of the employer's choosing, with written approval from the executive secretary.

(3) Each employer shall design and submit to the executive secretary an approvable trip reduction plan for each work site to meet the target drive-alone rate as specified by the target drive-alone rate schedule in R307-320-3.

(a) An employer may combine more than one work site in a trip reduction plan submittal.

(i) The target drive-alone rate for a multi-work site submission shall be a weighted average of the drive-alone rates for the individual work sites.

(ii) The employer may combine a trip reduction plan for any work site within the same county.

(b) The trip reduction plan submittal shall adhere to the following schedule:

(i) Submittal of a trip reduction plan shall be annually on or before the anniversary of the initial due date.

(ii) For employers within Salt Lake and Davis Counties:

(A) The trip reduction plan must be submitted for approval within 90 days after the employer has been notified.

(B) If the employer has not been notified, then the trip reduction plan must be submitted no later than 360 days after the effective date of this rule.

~~[(iii) For employers within Utah County, the trip reduction plan must be submitted within 90 days after notification by the Division of Air Quality following triggering of contingency measures for PM10 under the provisions of Section IX.A.8.b of the State Implementation Plan.]~~

(c) Materials and information submitted to the executive secretary shall include:

(i) A letter of commitment to fully implement an approved trip reduction plan signed by an authorized employee at the work site.

(ii) The name and signature of the employee transportation coordinator;

(iii) The drive-alone rate for the work site;

(iv) General work site information including name and address of organization; general layout of buildings and parking areas; location of major streets; location of nearby mass transit stops; number of total employees; number of employees arriving at the work site during peak travel periods; current and planned incentives, disincentives, and facilities available encouraging alternatives to single-occupant vehicle commuting; the type of activities conducted at the work site; and the time spent by the employee transportation coordinator in complying with the plan.

(d) A trip reduction plan designed to meet the target drive-alone rate schedule may include but is not limited to employer involvement in the following:

- (i) Subsidized bus passes;
- (ii) Rideshare matching programs;
- (iii) Vanpool leasing programs;
- (iv) Telecommuting programs;
- (v) Compressed work week schedule programs and flexible work schedule programs;
- (vi) Work site parking fee programs;

(vii) Preferential parking for rideshare participants;

(viii) Transportation for business related activities;

(ix) A guaranteed ride home program;

(x) On-site facility improvements;

(xi) Soliciting feedback from employees;

(xii) On-site daycare facilities;

(xiii) Coordination with local transit authorities for improved

mass transit service and information on mass transit programs; and

(xiv) Recognition and rewards for employee participation.

(e) An approvable plan shall contain all the information required in R307-320-4. The executive secretary shall approve or request revision of the trip reduction plan within 60 days of the plan submittal.

(4) Each employer shall implement a trip reduction plan approved by the executive secretary.

(5) Each employer shall inform employees of the trip reduction plan and options available to them for participation.

R307-320-7. Exemptions.

(1) An employer with less than 100 employees at a work site is exempt from the requirements of this rule.

(2) An employer who has met the target drive-alone rate is exempt from requirements stated in R307-320-4(3) and (4). The employer must still submit the drive-alone rate information to the executive secretary annually.

(3) Employees using vehicles for commute purposes as part of their job responsibility for emergency response are exempt from the drive-alone rate determination if they do not have the option, because of employer policies, to participate in telecommuting programs, compressed work week schedules, or as a rideshare driver, as approved by the executive secretary.

(a) An employer seeking exemption status shall comply with all requirements of the rule until an exemption is granted.

(b) The executive secretary shall approve or deny a request for exemption within 90 days of application.

(4) Other exemptions may be granted on a case by case basis and must be approved by the executive secretary.

(a) The employer seeking exemption must be able to demonstrate that the trip reduction program causes an adverse impact on the employer's ability to provide services or creates an undue hardship[s].

(b) The employer may also seek an exemption by providing an alternative to the Trip Reduction Program that shows, at a minimum, for the work site seeking exemption, a reduction in oxides of nitrogen equivalent to that achieved by the Trip Reduction Program when implemented to the target drive-alone rate schedule in the table in R307-320-3. The employer shall provide all substantiating information and calculations.

(c) An employer seeking exemption status shall comply with all requirements of the rule until an exemption is granted.

(d) The executive secretary shall approve or deny a request for exemption within 90 days of application.

KEY: air pollution, motor vehicles, trip reduction[4]

Date of Enactment or Last Substantive Amendment: [September 15, 1998]2006

Notice of Continuation: July 7, 2005

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(h)

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Change to Proposed Rule R307-320

R307. Environmental Quality, Air Quality.**R307-320. Ozone Maintenance Areas and Ogden City: Employer-Based Trip Reduction Program.****R307-320-1. Purpose.**

The purpose of this program is to reduce the number of measurable vehicle miles driven by employees commuting to and from work by requiring employers with work sites within ozone maintenance areas to implement strategies designed to reduce the employee drive-alone rate. An employer-based trip reduction program is authorized under 19-2-104(1)(h) and (2). It is a state implementation plan control strategy to reduce ambient ozone and is a potential contingency measure for carbon monoxide. An added benefit of the program is reducing the number of cars on increasingly congested roadways.

R307-320-2. Applicability.

(1) R307-320 applies to any federal, state, or local entity, or any other public department, district (including public universities and public school districts), or agency in Davis or Salt Lake County.

(2) If the contingency requirements for carbon monoxide are triggered as outlined in Section IX.C.8.f of the State Implementation Plan, R307-320 applies to any federal, state, or local entity, or any other public department, district (including public universities and public school districts), or agency in Ogden City.

R307-320-3. Definitions.

The following additional definitions apply to R307-320:

"Compressed Work Week" means any work schedule that eliminates at least one commute trip to a work site in each two week period.

"Drive-alone Rate" means the number of single-occupancy vehicles divided by the sum of single-occupancy vehicles, plus employees using mass transit, ridesharing, biking, walking, telecommuting or having credit for a compressed work week. The drive-alone rate calculation must be based on a typical Monday through Friday work week.

Drive-alone Rate = $\frac{\text{single-occupancy vehicles}}{\text{single-occupancy vehicles} + \text{mass transit users} + \text{rideshare participants} + \text{bikers} + \text{walkers} + \text{telecommuters} + \text{credit for compressed work week}}$.

"Employee" means any person including persons employed by public universities or school districts, who works at or reports to a single work site at least three days per week for at least six months of the year.

"Employee Transportation Coordinator" means a person assigned the responsibility of developing, implementing, monitoring, tracking, and marketing the trip reduction plan for the employer.

"Employer" means federal, state, or local entity, or any other public department, district (including public universities or public school districts), or agency.

"Peak Travel Period" means the period beginning at 6 a.m. and

ending at 10 a.m., Mondays through Fridays.

"Ridesharing" means transportation of more than one person for commute purposes in a vehicle.

"Single-occupancy Vehicles" means vehicles traveling to the work site with a driver and no passengers during the peak travel period.

"Target Drive-alone Rate" means a twenty percent reduction in the drive alone rate based on the 1990 census data for modes of travel in each county. The target drive-alone rate schedule is as follows:

TABLE
TARGET DRIVE-ALONE RATE SCHEDULE

	Davis County Drive-Alone Rate	Salt Lake County Drive-Alone Rate
From 1990 Census Data	0.76	0.77
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3rd year interim target drive-alone rate	0.67	0.67
4th year interim target drive-alone rate	0.65	0.65
5th year interim target drive-alone rate	0.63	0.64
6th year interim target drive-alone rate	0.61	0.62
Target drive-alone rate	0.61	0.62

"Telecommuting" means working at home or at a satellite work site, provided the employee does not use a single-occupancy vehicle to travel to the satellite work site.

"Trip Reduction Plan" means a set of strategies designed to reduce the drive-alone rate.

"Vehicle" means motorcycles and on-road vehicles powered by a gasoline or diesel internal combustion engine with nine or less seating positions for adults.

"Work Site" means a building and any group of buildings that are on physically contiguous parcels of land or on parcels separated solely by private or public roadways or rights-of way.

R307-320-4. Employer Requirements.

(1) Each employer shall assign an employee trip reduction

1 coordinator within 30 days after the effective date of R307-320.

2 (2) Each employer shall determine the drive-alone rate per
3 work site on an annual basis for a typical Monday through Friday
4 work week during the peak travel period. The drive-alone rate can
5 be determined by one of the following methods in (a), (b) or (c)
6 below.

7 (a) Information from an annual employee survey.

8 (i) The employer must use a standardized survey approved by
9 the executive secretary. The survey shall ask the travel distance
10 from the employee's home to the work site, what frequency and mode
11 of transportation the employee used to get to work, and how often
12 the employee participates in a telecommuting program or compressed
13 work week schedule.

14 (ii) The employer shall administer the survey and shall
15 capture, at a minimum, 75% of the employee population arriving at
16 the work site during the peak travel period.

17 (b) Verifiable information, less than one year old of the
18 submittal due date, from employer records including:

19 (i) employee work schedules;

20 (ii) employee participation in telecommuting schedules;

21 (iii) employee participation of mass transit;

22 (iv) employee participation in rideshare arrangements; and

23 (v) employee participation in non-vehicular transit.

24 (c) Another method of the employer's choosing, with written
25 approval from the executive secretary.

26 (3) Each employer shall design and submit to the executive
27 secretary an approvable trip reduction plan for each work site to
28 meet the target drive-alone rate as specified by the target drive-
29 alone rate schedule in R307-320-3.

30 (a) An employer may combine more than one work site in a
31 trip reduction plan submittal.

32 (i) The target drive-alone rate for a multi-work site
33 submission shall be a weighted average of the drive-alone rates
34 for the individual work sites.

35 (ii) The employer may combine a trip reduction plan for any
36 work site within the same county.

37 (b) The trip reduction plan submittal shall adhere to the
38 following schedule:

39 (i) Submittal of a trip reduction plan shall be annually on
40 or before the anniversary of the initial due date.

41 (ii) For employers within [~~Salt Lake and Davis Counties~~]
42 ozone maintenance areas:

43 (A) The trip reduction plan must be submitted for approval
44 within 90 days after the employer has been notified.

45 (B) If the employer has not been notified, then the trip
46 reduction plan must be submitted no later than 360 days after the
47 effective date of this rule.

48 (c) Materials and information submitted to the executive
49 secretary shall include:

50 (i) A letter of commitment to fully implement an approved
51 trip reduction plan signed by an authorized employee at the work
52 site.

53 (ii) The name and signature of the employee transportation

1 coordinator;

2 (iii) The drive-alone rate for the work site;

3 (iv) General work site information including name and
4 address of organization; general layout of buildings and parking
5 areas; location of major streets; location of nearby mass transit
6 stops; number of total employees; number of employees arriving at
7 the work site during peak travel periods; current and planned
8 incentives, disincentives, and facilities available encouraging
9 alternatives to single-occupant vehicle commuting; the type of
10 activities conducted at the work site; and the time spent by the
11 employee transportation coordinator in complying with the plan.

12 (d) A trip reduction plan designed to meet the target drive-
13 alone rate schedule may include but is not limited to employer
14 involvement in the following:

15 (i) Subsidized bus passes;

16 (ii) Rideshare matching programs;

17 (iii) Vanpool leasing programs;

18 (iv) Telecommuting programs;

19 (v) Compressed work week schedule programs and flexible work
20 schedule programs;

21 (vi) Work site parking fee programs;

22 (vii) Preferential parking for rideshare participants;

23 (viii) Transportation for business related activities;

24 (ix) A guaranteed ride home program;

25 (x) On-site facility improvements;

26 (xi) Soliciting feedback from employees;

27 (xii) On-site daycare facilities;

28 (xiii) Coordination with local transit authorities for
29 improved mass transit service and information on mass transit
30 programs; and

31 (xiv) Recognition and rewards for employee participation.

32 (e) An approvable plan shall contain all the information
33 required in R307-320-4. The executive secretary ~~[shall]~~will
34 approve or request revision of the trip reduction plan within 60
35 days of the plan submittal.

36 (4) Each employer shall implement a trip reduction plan
37 approved by the executive secretary.

38 (5) Each employer shall inform employees of the trip
39 reduction plan and options available to them for participation.
40

41 **R307-320-5. Recordkeeping.**

42 (1) The employer shall keep records of all documents
43 necessary to prove compliance with and verify implementation of an
44 approved trip reduction plan for at least two years from the plan
45 approval date.

46 (2) Approved trip reduction plans shall be kept for five
47 years from date of approval.

48 (3) Employer trip reduction records are subject to review by
49 representatives of the executive secretary.
50

51 **R307-320-6. Violations.**

52 (1) The following are violations of this rule:

53 (a) failure to submit an approvable employer-based trip

1 reduction plan as specified in R307-320-4;

2 (b) providing false information;

3 (c) failure to submit a revised employer-based trip
4 reduction plan when requested by the executive secretary;

5 (d) failure to implement an approved trip reduction plan;

6 (e) failure to maintain records as specified in R307-320-5;

7 (f) upon receipt of the second disapproval notice and until
8 a revised plan is submitted and approved, the employer is in
9 violation of this rule.

10 (2) Failure to achieve the target drive-alone rate is not a
11 violation of this rule.

12
13 **R307-320-7. Exemptions.**

14 (1) An employer with less than 100 employees at a work site
15 is exempt from the requirements of this rule.

16 (2) An employer who has met the target drive-alone rate is
17 exempt from requirements stated in R307-320-4(3) and (4). The
18 employer must still submit the drive-alone rate information to the
19 executive secretary annually.

20 (3) Employees using vehicles for commute purposes as part of
21 their job responsibility for emergency response are exempt from
22 the drive-alone rate determination if they do not have the option,
23 because of employer policies, to participate in telecommuting
24 programs, compressed work week schedules, or as a rideshare
25 driver, as approved by the executive secretary.

26 (a) An employer seeking exemption status shall comply with
27 all requirements of the rule until an exemption is granted.

28 (b) The executive secretary shall approve or deny a request
29 for exemption within 90 days of application.

30 (4) Other exemptions may be granted on a case by case basis
31 and must be approved by the executive secretary.

32 (a) The employer seeking exemption must be able to
33 demonstrate that the trip reduction program causes an adverse
34 impact on the employer's ability to provide services or creates an
35 undue hardship.

36 (b) The employer may also seek an exemption by providing an
37 alternative to the Trip Reduction Program that shows, at a
38 minimum, for the work site seeking exemption, a reduction in
39 oxides of nitrogen equivalent to that achieved by the Trip
40 Reduction Program when implemented to the target drive-alone rate
41 schedule in the table in R307-320-3. The employer shall provide
42 all substantiating information and calculations.

43 (c) An employer seeking exemption status shall comply with
44 all requirements of the rule until an exemption is granted.

45 (d) The executive secretary shall approve or deny a request
46 for exemption within 90 days of application.

47
48 **KEY: air pollution, motor vehicles, trip reduction**

49 **Date of Enactment or Last Substantive Amendment: 200[6]7**

50 **Notice of Continuation: July 7, 2005**

51 **Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(h)**

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53

Original Proposal for R307-325

Environmental Quality, Air Quality
R307-325
Davis and Salt Lake Counties and
Ozone Nonattainment Areas: Ozone
Provisions

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE No.: 29003

FILED: 09/07/2006, 16:05

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by moving language to other appropriate rules, adding language to align the rule with the new ozone maintenance plan, deleting obsolete language, and making other grammatical corrections throughout Rule R307-325 to improve the readability of the rule. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-325 to improve the readability of the rule. Other changes that are proposed are divided into the following three areas: 1) General Compliance Provisions – The ozone reasonably available control technology (RACT) requirements were originally grouped together as one subsection of the Utah Air Conservation Rules. In 1998, the Board adopted a major restructuring of the rules and separated the RACT requirements into individual rules. The general provisions at the beginning of the old RACT subsection became a new rule, Rule R307-325, that established applicability, testing, and compliance provisions for all of the new RACT rules. This was an awkward solution, and the Board is proposing that the applicability, testing, and compliance provisions that are currently in Rule R307-325 be included separately in each of the ozone RACT rules. The applicability and testing provisions are deleted from Rule R307-325 because these provisions are not needed for the general requirements; 2) Generic RACT provisions – The 1990 Clean Air Act required the Environmental Protection Agency (EPA) to develop 11 new Control Technique Guideline documents for sources of volatile organic compounds (VOC)

and Alternative Control Techniques for sources of NOx by November 1993. EPA did not meet this deadline; however, the State was still required to adopt RACT regulations for these source categories. The one-hour ozone maintenance plan addressed this issue by adopting generic RACT provisions for both VOC and NOx in Section R307-325-2. EPA did not accept this approach, and later versions of the maintenance plan established case-by-case VOC RACT for all major sources of VOC. In addition, EPA granted a NOx waiver that addressed the requirement for NOx RACT. When EPA approved the one-hour maintenance plan in 1997, the Federal Register notice stated that the generic RACT rules were not required, and did not meet federal guidelines. The case-by-case determinations were all that was needed. The Division of Air Quality recommends deleting all of Section R307-325-2 because the generic RACT provisions are not required, and no longer serve a useful purpose; and 3) Low-NOx Burner Contingency Measure – When the one-hour ozone maintenance plan was originally adopted, a series of contingency measures was added to Utah's rules that could be implemented immediately if the area violated the ozone standard. Several of the contingency measures that would reduce VOC emissions were implemented proactively in 1999 because the area was not meeting the new 8-hour ozone standard. The eight-hour maintenance plan is not required to contain contingency measures that have been pre-adopted. Instead, the plan must include a list of potential measures and a schedule for adopting rules expeditiously if the ozone standard is violated. The proposal deletes Section R307-325-4 that requires the installation of low-NOx burners as a contingency measure for the ozone maintenance plan. Current modeling indicates that VOC reductions are more effective than NOx reductions to reduce ambient concentrations of ozone, and therefore, this control strategy may not be the best approach to address a future violation of the 8-hour ozone standard. This strategy is included in the list of possible contingency measures in the ozone plan and would be evaluated as one of many possible choices if the standard is violated in the future. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

- ❖ **THE STATE BUDGET:** Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ **LOCAL GOVERNMENTS:** Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ **OTHER PERSONS:** Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Jan Miller or Mat E. Carlile at the above address, by phone at 801-536-4042 or 801-536-4136, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at janmiller@utah.gov or MCARLILE@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM ON 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-325. ~~[Davis and Salt Lake Counties and]~~ Ozone Nonattainment and Maintenance Areas: General Requirements [Ozone Provisions].

R307-325-1. Purpose.

Establish general requirements for control of volatile organic compounds in nonattainment and maintenance areas.

R307-325-2. Applicability.

R307-325 applies to all sources located in any nonattainment or maintenance area for ozone.

R307-325-[4]3. Definition[s]~~[s]~~, Applicability and General Requirement[s].

~~[(1) R307-325 applies to all sources in R307-326 through 341, major sources as defined and outlined in section 182 of the Clean Air Act and non-major sources located in Davis and Salt Lake Counties and in any nonattainment area for ozone as defined in the State Implementation Plan. For permitting of any new source or modification of any existing source, see R307-401; for operating permits, see R307-415.~~

~~—(2) No person [may permit] shall allow or cause volatile organic compounds [VOCs] to be spilled, discarded, stored in open containers, or handled in any other manner, which would result in evaporation in excess of that which would result from the application of [reasonably available control technology (RACT)] (as defined in 40 CFR 51.100(e)) [control technology that is reasonably available considering technological and economic feasibility].~~

~~[(3) Any person may apply to the executive secretary for approval of an alternative test method, an alternative method of control, an alternative compliance period, an alternative emission limit, or an alternative monitoring schedule. The application must include a demonstration that the proposed alternative produces an equal or greater air quality benefit than those required by R307-325 through 341, or that the alternative test method is equivalent to that required by these regulations. The executive secretary shall obtain concurrence from EPA when approving an alternative test method, an alternative method of control, an alternative compliance period, an alternative emission limit, or an alternative monitoring schedule.~~

~~—(4) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA approved state methods, to determine the efficiency of the control device. In addition, any control device must meet the applicable requirements, (including record keeping) of R307-340-2 and -13. A record of all tests, monitoring, and inspections required by R307-325 through 341 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or his representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days of when it was found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.~~

~~—(5) For purposes of determining compliance with emission limits, VOCs and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.~~

R307-325-2. Existing Sources.

~~—(1) Existing Major Sources.~~

~~—(a) Any source of VOCs as of June 14, 1995, for which no specific emission limitations or other control requirement has been set forth in R307-325 through 341 and which is classified as a major source as defined and outlined in section 182 of the Clean Air Act shall utilize reasonably available control technology (RACT) as defined in 40 CFR 51.100(e).~~

~~—(b) Existing sources of nitrogen oxides for which no specific emission limitations or other control requirement has been set forth in R307-325 through 341 and which are classified as a major source as defined and outlined in Section 182 of the federal Clean Air Act shall utilize Reasonably Available Control Technology (RACT) as outlined in R307-325 through 341 for specific source categories or as defined in 40 CFR 51.100(e). RACT determinations shall be made on a case-by-case basis and may, to the extent allowable by the executive secretary, be applied on a regionally averaged basis for the pertinent nonattainment area. Application of RACT to sources of oxides of nitrogen within the area of nonattainment for ozone and in Davis and Salt Lake Counties may, in some instances, have been predicated on other requirements of state or federal rule. In such instances, the executive secretary may determine that such prior application of RACT has satisfied all applicable requirements, regardless of whether or not the level of controlled emissions due to application of RACT for one purpose meet the presumptive level of RACT for another. In other instances, where RACT may also be required for reasons other than Section 182 of the Act, the executive~~

secretary may require the most stringent level of control which satisfies RACT.

(c) The uncontrolled emissions of such sources shall be based upon design capacity or maximum production rate, whichever is greater, at 8760 hours/year operation, and before add-on controls. The emissions from all emission points within the source which are not specifically regulated in R307-325 through 341, and which are not pending regulation as per Section 183 of the Clean Air Act, are combined to determine capacity.

(d) Sources with potential uncontrolled emissions of VOC or nitrogen oxides in excess of the threshold for a major source outlined in Section 182 of the federal Clean Air Act, but with actual emissions of a lesser amount, may avoid the requirement to apply RACT as defined in 40 CFR 51.100(e) by obtaining an enforceable approval order limiting emissions to actual rates, by restriction of production capacity or hours of operation.

(2) For sources subject to specific rules which have a cutoff limit for applicability, including (1) above, once a source exceeds the cutoff limit, future operation at emission limits below the cutoff does not preclude RACT (as defined in 40 CFR 51.100(e)) requirements and rule applicability as stated in R307-401.

(3) For unknown sources existing on June 14, 1995, which are major or Control Techniques Guidance applicable sources and which are found by either the State or EPA in the future, the State will expeditiously develop a specific RACT determination based on the existing Control Techniques Guidance or as defined in 40 CFR 51.100(e) for such sources within a reasonable time after their discovery and submit such determination to EPA for approval as specific SIP revisions.

R307-325.3. Compliance Schedule.

By September 29, 1981, 180 days after the effective date of R307-325 through 341, all sources shall be in compliance.

R307-325.4. Contingency Requirement for Ozone Nonattainment Areas and Salt Lake and Davis Counties.

If the Contingency Requirements for nitrogen oxides are triggered as outlined in Section IX.D.2.b(2) of the State Implementation Plan, all existing sources excluding non-commercial residential dwellings shall install either low oxides of nitrogen burner technology as described in R307-401.4(3), unless such requirement is not physically practical or cost effective, or controls resulting from application of an equivalent technology, both of which shall be determined by the executive secretary. All sources required to install new controls under R307-325.4 shall submit, within two months after the trigger date, either a schedule for installing the equipment or a request for an exemption. The required equipment shall be operational as soon as practicable or within a reasonable time agreed upon by the source and the executive secretary.

R307-325.4. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, emission controls, ozone, RACT
Date of Enactment or Last Substantive Amendment: [June 16, 2006]

Notice of Continuation: August 1, 2003

Authorizing, and Implemented or Interpreted Law: [19-2-101; 19-2-104(1)(a)]

Environmental Quality, Air Quality R307-326 Davis and Salt Lake Counties and Ozone Nonattainment Areas: Control of Hydrocarbon Emissions in Refineries

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE NO.: 29006

FILED: 09/07/2006, 16:06

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other grammatical corrections throughout Rule R307-326 to improve the readability of the rule. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-326 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-326. In addition, the applicability, testing, and compliance provisions that were located in Section R307-325-1 were moved into Rule R307-326. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

❖ **THE STATE BUDGET:** Because these revisions do not create any new requirements, no change in costs is expected to the state budget.

Change to Proposed Rule R307-325

1 **R307. Environmental Quality, Air Quality.**

2 **R307-325. Ozone Nonattainment and Maintenance Areas:**

3 **General Requirements**

4 **R307-325-1. Purpose.**

5 The purpose of R307-325 is to [E]establish general
6 requirements for control of volatile organic compounds
7 (VOCs) in any nonattainment [and]or maintenance area[s].
8

9 **R307-325-2. Applicability.**

10 R307-325 applies to all sources located in any
11 nonattainment or maintenance area for ozone.
12

13 **R307-325-3. Definition and General Requirement.**

14 No person shall allow or cause volatile organic
15 compounds (VOCs) to be spilled, discarded, stored in open
16 containers, or handled in any other manner that would
17 result in greater evaporation of VOCs than would have if
18 reasonably available control technology (RACT) had been
19 applied. [, which would result in evaporation in excess of
20 that which would result from the application of control
21 technology that is reasonably available considering
22 technological and economic feasibility.]
23

24 **R307-325-4. Compliance Schedule.**

25 All sources within any newly designated nonattainment
26 area for ozone shall be in compliance with this rule within
27 180 days of the effective date of designation to
28 nonattainment.
29

30 **KEY: air pollution, emission controls, ozone, RACT**

31 **Date of Enactment or Last Substantive Amendment: 200[6]7**

32 **Notice of Continuation: August 1, 2003**

33 **19-2-104(1)(a)**
34
35

Original Proposal for R307-326

secretary may require the most stringent level of control which satisfies RACT.

(c) The uncontrolled emissions of such sources shall be based upon design capacity or maximum production rate, whichever is greater, at 8760 hours/year operation, and before add-on controls. The emissions from all emission points within the source which are not specifically regulated in R307-325 through 341, and which are not pending regulation as per Section 183 of the Clean Air Act, are combined to determine capacity.

(d) Sources with potential uncontrolled emissions of VOC or nitrogen oxides in excess of the threshold for a major source outlined in Section 182 of the federal Clean Air Act, but with actual emissions of a lesser amount, may avoid the requirement to apply RACT as defined in 40 CFR 51.100(e) by obtaining an enforceable approval order limiting emissions to actual rates, by restriction of production capacity or hours of operation.

(2) For sources subject to specific rules which have a cutoff limit for applicability, including (1) above, once a source exceeds the cutoff limit, future operation at emission limits below the cutoff does not preclude RACT (as defined in 40 CFR 51.100(e)) requirements and rule applicability as stated in R307-401.

(3) For unknown sources existing on June 14, 1995, which are major or Control Techniques Guidance applicable sources and which are found by either the State or EPA in the future, the State will expeditiously develop a specific RACT determination based on the existing Control Techniques Guidance or as defined in 40 CFR 51.100(e) for such sources within a reasonable time after their discovery and submit such determination to EPA for approval as specific SIP revisions.

R307-325-3. Compliance Schedule.

By September 29, 1981, 180 days after the effective date of R307-325 through 341, all sources shall be in compliance.

R307-325-4. Contingency Requirement for Ozone Nonattainment Areas and Salt Lake and Davis Counties.

If the Contingency Requirements for nitrogen oxides are triggered as outlined in Section IX.D.2.h(2) of the State Implementation Plan, all existing sources excluding non-commercial residential dwellings shall install either low oxides of nitrogen burner technology as described in R307-401.4(3), unless such requirement is not physically practical or cost effective, or controls resulting from application of an equivalent technology, both of which shall be determined by the executive secretary. All sources required to install new controls under R307-325-4 shall submit, within two months after the trigger date, either a schedule for installing the equipment or a request for an exemption. The required equipment shall be operational as soon as practicable or within a reasonable time agreed upon by the source and the executive secretary.

]

R307-325-4. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, emission controls, ozone, RACT

Date of Enactment or Last Substantive Amendment: [June 16, 2006]

Notice of Continuation: August 1, 2003

Authorizing, and Implemented or Interpreted Law: [19-2-101; 19-2-104(1)(a)]

Environmental Quality, Air Quality R307-326

Davis and Salt Lake Counties and Ozone Nonattainment Areas: Control of Hydrocarbon Emissions in Refineries

NOTICE OF PROPOSED RULE

(Amendment)

DAR File No.: 29006

FILED: 09/07/2006, 16:06

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other grammatical corrections throughout Rule R307-326 to improve the readability of the rule. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-326 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-326. In addition, the applicability, testing, and compliance provisions that were located in Section R307-325-1 were moved into Rule R307-326. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.

❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.

❖ OTHER PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-326. ~~[Davis and Salt Lake Counties and]~~ Ozone Nonattainment and Maintenance Areas: Control of Hydrocarbon Emissions in Refineries.

R307-326-1. Purpose.

The purpose of R307-326 is to establish Reasonably Available Control Technology (RACT), as required by section 182(2)(A) of the Clean Air Act, for the control of hydrocarbon emissions from refineries that are located in ozone nonattainment and maintenance areas. The rule is based on federal control technique guidance documents.

R307-326-2. Applicability.

R307-326 applies to the owner or operator of any refinery located in any ozone nonattainment or maintenance area.

R307-326-[1]3. ~~[Applicability and]~~ Definitions.

~~[(1) R307-325 establishes applicability and general requirements for R307-326.~~

~~—(2)—~~ The following additional definitions apply to R307-326[1].

"Accumulator" means the reservoir of a condensing unit receiving the condensate from the condenser.

"Condens[er]" means any device ~~[which] that~~ removes condensable vapors by a reduction in the temperature of ~~[the]~~ captured gases.

"Control System" means any number of control devices, including condens[er]s, ~~[which] that~~ are designed and operated to reduce the quantity of volatile organic compounds (VOC) emitted to the atmosphere.

"Hot Well" means the reservoir of a condensing unit receiving the warm condensate consisting primarily of water from the condenser.

"Petroleum Refinery Complex" means any source or installation engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through distillation of petroleum or through redistillation, cracking, rearrangement, or reforming of unfinished petroleum derivatives.

"Process Drain" means any drain used in a refinery complex on equipment ~~[which] that~~ processes[1] or transfers a volatile organic compound or a mixture of volatile organic compounds.

"Process Unit Turnaround" means the procedure of shutting a refinery unit down after a run to do necessary maintenance and repair work and putting the unit back in operation.

"Vacuum Producing System" means any reciprocating, rotary, or centrifugal blower or compressor, or any jet ejector or device that takes suction from a pressure below atmospheric and discharges against atmospheric pressure.

R307-326-[2]4. Vacuum Producing Systems.

The emission of noncondensable volatile organic compounds from the condensers, hot wells, or accumulators of vacuum producing systems shall be controlled by:

- (1) piping the noncondensable vapors to a firebox or incinerator, or
- (2) compressing the vapors and adding them to the refinery fuel gas, or
- (3) other equally effective means provided the design and effectiveness of such means are documented, ~~[and]~~ submitted to, and approved by the executive secretary.

R307-326-[3]5. Wastewater (Oil/Water) Systems.

Any wastewater separator handling volatile organic compounds shall be equipped with:

- (1) covers and seals approved by the executive secretary on all separators and forebays,
- (2) lids or seals on all openings in covers, separators, and forebays. Such lids or seals shall be in the closed position at all times except when in actual use.

R307-326-[4]6. Process Unit Turnaround.

The owner or operator of a petroleum refinery shall insure that a minimum of ~~[volatile organic compounds (VOC)]~~ are emitted to the atmosphere during process unit turnarounds. The owner or operator shall develop and submit to the executive secretary for approval a procedure for minimizing VOC emissions during turnarounds. ~~[The~~

~~procedure shall be submitted by April 1, 1990.~~ As a minimum the procedure shall provide for:

- (1) venting of the process unit or vessel during depressurization and purging to a vapor recovery system, flare or firebox, and
- (2) preventing discharge to the atmosphere of emissions of volatile organic compounds from a process unit or vessel until its internal pressure is 136 kPa (19.7 psia) or less; or
- (3) an equally effective system provided the design and effectiveness of such system are documented and submitted to and approved by the executive secretary.
- (4) keeping records of the following items:
 - (a) every date that each process unit or vessel is shut down;
 - (b) the approximate vessel VOC concentration when the VOCs were first discharged to the atmosphere; and
 - (c) the approximate total quantity of VOCs emitted to the atmosphere.
- (5) maintaining records. The records required in (4) above shall be kept for at least two years and shall be made available for review by the executive secretary or ~~his~~ the executive secretary's representative.

R307-326-[5]7. Catalytic Cracking Units.

Flue gas produced by catalytic cracker catalyst regeneration units shall be vented to a waste heat boiler~~;~~ or a process heater firebox, or incinerated, or controlled by other methods, provided the design and effectiveness of such methods are documented, ~~and~~ submitted to, and approved by the executive secretary.

R307-326-[6]8. Safety Pressure Relief Valves.

All safety pressure relief valves handling organic material shall be vented to a flare, firebox, or vapor recovery system, or controlled by the inspection, monitoring, and repair requirements described in R307-326-[7]9.

R307-326-[7]9. Monitoring of Leaks from Petroleum Refinery Equipment.

(1) The owner or operator of a petroleum refinery complex shall develop and conduct a VOC monitoring program and shall follow the recording, reporting, and operating requirements consistent with R307-326-[7]9. The monitoring program shall be submitted 30 days prior to start up of the petroleum refinery complex or as determined necessary by the executive secretary.

(2) Any affected component within a petroleum refinery complex found to be leaking shall be repaired and retested as soon as practicable, but not later than fifteen (15) days after the leak is detected. A leaking component is defined as one ~~which~~ that has a VOC concentration exceeding 10,000 parts per million by volume (ppmv) when tested by a VOC detection instrument at the leak source in the manner described in 40 CFR 60, Appendix A, Reference Method 21, using methane or hexane as the calibration gas. Components not subject to New Source Performance Standards Subpart GGG shall use methane or hexane as calibration gas, provided a relative response factor for each individual instrument is determined for the calibration gas used. Those leaks that cannot be repaired until the unit is shut down for turnaround shall be identified with a tag and recorded as per (6) below and shall be reported as ~~required by~~ per (7) below. The executive secretary, in coordination with the refinery owner or operator, may require early unit turnaround based on the number and severity of tagged leaks awaiting turnaround.

(3) Monitoring Requirements.

(a) In order to ensure that all existing VOC leaks are identified and that new VOC leaks are located as soon as practicable, the refinery owner or operator shall perform necessary monitoring using visual

observations when specified or the method described in 40 CFR 60, Appendix A, Reference Method 21, as follows:

- (i) Monitor at least one time per year (annually) all pump seals, valves in liquid service, and process drains;
- (ii) ~~Monitor~~ Monitor four times per year (quarterly) all compressor seals, valves in gaseous service, and pressure relief valves in gaseous service~~;~~;
- (iii) Monitor visually 52 times per year (weekly) all pump seals;
- (iv) Monitor within 24 hours (with a portable VOC detection device) or repair within 15 days any pump seal from which liquids are observed dripping;
- (v) Monitor any relief valve within 24 hours after it has been vented to the atmosphere;
- (vi) Monitor immediately after repair any component that was found leaking;

(vii) ~~For~~ For all other valves considered "unsafe-to-monitor" or inaccessible during an annual inspection, the owner ~~or~~ operator shall document to the executive secretary the number of valves considered "unsafe-to-monitor" or inaccessible, the dangers involved or reasons for inaccessibility, the location of these valves, and the procedures that the owner ~~or~~ operator shall follow to ensure that the valves do not leak. The documentation for each calendar year shall be submitted for approval to the executive secretary 15 days after the last day of each calendar year. At a minimum, the inaccessible valves shall be monitored at least once per year (annually). ~~This documentation shall be submitted for approval to the executive secretary 15 days after the last day of each calendar year.~~

(b) For the purpose of R307-326, gaseous service for pipeline valves and pressure relief valves is defined as the VOC being gaseous at conditions that prevail in the components during normal operations. Pipeline valves and pressure relief valves in gaseous service and other components subject to leaks shall be noted or marked so that their location within the refinery complex is obvious to the refinery operator performing the monitoring and to the State of Utah, Division of Air Quality.

(4) Exemptions. The following are exempt from the monitoring requirements of (3) above:

(a) Pressure relief devices ~~which~~ that are connected to an operating flare header, firebox, or vapor recovery devices, storage tank valves, and valves that are not externally regulated~~;~~ and

(b) Refinery equipment containing a stream composition less than 10 percent by weight VOC; and

(c) Refinery equipment containing natural gas supplied by a public utility as defined by the Utah Public Service Commission.

(5) Alternat~~iv~~e Monitoring Methods and Requirements.

(a) If at any time after two complete liquid service inspections and five complete gaseous service inspections, the owner or operator of a petroleum refinery can demonstrate that modifications to (3) above are in order, he may apply in writing to the Air Quality Board for a variance from the requirements of (3) above.

(b) This submittal shall include data that have been developed to justify the modification to (3) above. As a minimum, the submittal should contain the following information:

- (i) the name and address of the company;
- (ii) the name and telephone number of the responsible company representative;
- (iii) a description of the proposed alternat~~iv~~e monitoring procedures; and
- (iv) a description of the proposed alternat~~iv~~e operational or equipment controls.

(6) Recording Requirements. Identified leaks shall be noted and affixed with a readily visible and weatherproof tag bearing the identification of the leak and the date the leak was detected. The tag shall remain in place until the leaking component is repaired. The presence of the leak shall also be noted in a log maintained by the operator or owner of the refinery. The log shall contain, at a minimum, the name of the process unit where the component is located, the type of component, the tag number, the date the leak ~~was~~ is detected, the date repaired, and the date and instrument reading when the recheck of the component is made. The log should also indicate those leaks ~~which~~ that cannot be repaired until turnaround, and summarize the total number of components found leaking. The operator or owner of the refinery complex shall retain the leak detection log for two years after the leak has been repaired and shall make the log available to the executive secretary upon request.

(7) Reporting Requirements. The operator or owner of a petroleum refinery complex shall submit a report to the executive secretary by the 15th day of January, April, July, and October of each year listing the total number of components inspected, all leaks that have been located during the previous 3 calendar months but not repaired within 15 days, all leaking components awaiting unit turnaround and the total number of components found leaking. In addition, the refinery operator or owner shall submit a signed statement with each report that all monitoring has been performed as stipulated in R307-326-~~7~~9.

(8) Additional Requirements. Any time a valve, with the exception of safety pressure relief valves, is located at the end of a pipe or line containing VOC, the end of the line shall be sealed with one of the following: a second valve, a blind flange, a plug or a cap. This sealing device shall only be removed when the line is in use for sampling.

R307-326-10. Alternate Methods of Control.

(1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-326, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.

(2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all tests, monitoring, and inspections required by R307-326 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, VOCs and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude

these negligibly reactive compounds when determining compliance with an emissions standard.

R307-326-11. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, refinery, gasoline, ozone

Date of Enactment or Last Substantive Amendment: [September 15, 1998] 2006

Notice of Continuation: August 1, 2003

Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104(1)(a)

Environmental Quality, Air Quality **R307-327** Davis and Salt Lake Counties and Ozone Nonattainment Areas: Petroleum Liquid Storage

NOTICE OF PROPOSED RULE

(Amendment)

DAR File No.: 29004

FILED: 09/07/2006, 16:05

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-327 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-327. In addition, the applicability, testing, and compliance provisions that were located in Section R307-325-1 were moved into Rule R307-327. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

Change to Proposed Rule R307-326

R307. Environmental Quality, Air Quality.**R307-326. Ozone Nonattainment and Maintenance Areas: Control of Hydrocarbon Emissions in Petroleum Refineries.****R307-326-1. Purpose.**

The purpose of R307-326 is to establish Reasonably Available Control Technology (RACT), as required by section 182(2)(A) of the Clean Air Act, for the control of hydrocarbon emissions from petroleum refineries that are located in ozone nonattainment and maintenance areas. The rule is based on federal control technique guidance documents.

R307-326-2. Applicability.

R307-326 applies to the owner or operator of any petroleum refinery located in any ozone nonattainment or maintenance area.

R307-326-3. Definitions.

The following additional definitions apply to R307-326[+].

"Accumulator" means the reservoir of a condensing unit receiving the condensate from the condenser.

"Condens[er]" means any device that removes condensable vapors by a reduction in the temperature of captured gases.

"Control System" means any number of control devices, including condensers, that are designed and operated to reduce the quantity of [~~volatile organic compounds~~-()VOCs(+)] emitted to the atmosphere.

"Hot Well" means the reservoir of a condensing unit receiving the warm condensate consisting primarily of water from the condenser.

"Petroleum Refinery Complex" means any source or installation engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through distillation of petroleum or through redistillation, cracking, rearrangement, or reforming of unfinished petroleum derivatives.

"Process Drain" means any drain used in a refinery complex on equipment that processes or transfers a [~~volatile organic compound~~]VOC or a mixture of [~~volatile organic compounds~~]VOCs.

"Process Unit Turnaround" means the procedure of shutting a refinery unit down after a run to do necessary maintenance and repair work and putting the unit back in operation.

"Vacuum Producing System" means any reciprocating, rotary, or centrifugal blower or compressor, or any jet ejector or device that takes suction from a pressure below atmospheric and discharges against atmospheric pressure.

R307-326-4. Vacuum Producing Systems.

The emission of noncondensable [~~volatile organic compounds~~]VOCs from the condensers, hot wells, or accumulators of vacuum producing systems shall be controlled by:

(1) piping the noncondensable vapors to a firebox or incinerator, or

(2) compressing the vapors and adding them to the refinery

1 fuel gas, or

2 (3) other equally effective means provided the design and
3 effectiveness of such means are documented and submitted to and
4 approved by the executive secretary.

5
6 **R307-326-5. Wastewater (Oil/Water) Systems.**

7 Any wastewater separator handling ~~[volatile—organic~~
8 ~~compounds]~~ VOCs shall be equipped with:

9 (1) covers and seals approved by the executive secretary on
10 all separators and forebays,

11 (2) lids or seals on all openings in covers, separators, and
12 forebays. Such lids or seals shall be in the closed position at
13 all times except when in actual use.

14
15 **R307-326-6. Process Unit Turnaround.**

16 The owner or operator of a petroleum refinery shall insure
17 that a minimum of VOCs are emitted to the atmosphere during
18 process unit turnarounds. The owner or operator shall develop and
19 submit to the executive secretary for approval a procedure for
20 minimizing VOC emissions during turnarounds. ~~A[s]t~~ a minimum the
21 procedure shall provide for:

22 (1) venting of the process unit or vessel during
23 depressurization and purging to a vapor recovery system, flare or
24 firebox, and

25 (2) preventing discharge to the atmosphere of emissions of
26 ~~[volatile—organic—compounds]~~ VOCs from a process unit or vessel
27 until its internal pressure is 136 kPa (19.7 psia) or less; or

28 (3) an equally effective system provided the design and
29 effectiveness of such system are documented and submitted to and
30 approved by the executive secretary.

31 (4) keeping records of the following items:

32 (a) every date that each process unit or vessel is shut
33 down;

34 (b) the approximate vessel VOC concentration when the VOCs
35 were first discharged to the atmosphere; and

36 (c) the approximate total quantity of VOCs emitted to the
37 atmosphere.

38 (5) maintaining records. The records required in (4) above
39 shall be kept for at least two years and shall be made available
40 for review by the executive secretary or the executive secretary's
41 representative.

42
43 **R307-326-7. Catalytic Cracking Units.**

44 Flue gas produced by catalytic cracker catalyst regeneration
45 units shall be vented to a waste heat boiler or a process heater
46 firebox, or incinerated, or controlled by other methods, provided
47 the design and effectiveness of such methods are documented,
48 submitted to, and approved by the executive secretary.

49
50 **R307-326-8. Safety Pressure Relief Valves.**

51 All safety pressure relief valves handling organic material
52 shall be vented to a flare, firebox, or vapor recovery system, or

1 controlled by the inspection, monitoring, and repair requirements
2 described in R307-326-9.

3
4 **R307-326-9. Monitoring of Leaks from Petroleum Refinery**
5 **Equipment.**

6 (1) The owner or operator of a petroleum refinery complex
7 shall develop and conduct a VOC monitoring program and shall
8 follow the recording, reporting, and operating requirements
9 consistent with R307-326-9. The monitoring program shall be
10 submitted 30 days prior to start up of the petroleum refinery
11 complex or as determined necessary by the executive secretary.

12 (2) Any affected component within a petroleum refinery
13 complex found to be leaking shall be repaired and retested as soon
14 as practicable, but not later than fifteen (15) days after the
15 leak is detected. A leaking component is defined as one that has
16 a ~~[VOC]~~ concentration of VOCs exceeding 10,000 parts per million
17 by volume (ppmv) when tested by a VOC detection instrument at the
18 leak source in the manner described in 40 CFR 60, Appendix A,
19 Reference Method 21, using methane or hexane as the calibration
20 gas. Components not subject to New Source Performance Standards
21 Subpart GGG shall use methane or hexane as calibration gas,
22 provided a relative response factor for each individual instrument
23 is determined for the calibration gas used. Those leaks that
24 cannot be repaired until the unit is shut down for turnaround
25 shall be identified with a tag and recorded as per (6) below and
26 shall be reported as per (7) below. The executive secretary, in
27 coordination with the refinery owner or operator, may require
28 early unit turnaround based on the number and severity of tagged
29 leaks awaiting turnaround.

30 (3) Monitoring Requirements.

31 (a) In order to ensure that all existing VOC leaks are
32 identified and that new VOC leaks are located as soon as
33 practicable, the refinery owner or operator shall perform
34 necessary monitoring using visual observations when specified or
35 the method described in 40 CFR 60, Appendix A, Reference Method
36 21, as follows:

37 (i) Monitor at least one time per year (annually) all pump
38 seals, valves in liquid service, and process drains;

39 (ii) Monitor four times per year (quarterly) all compressor
40 seals, valves in gaseous service, and pressure relief valves in
41 gaseous service;

42 (iii) Monitor visually 52 times per year (weekly) all pump
43 seals;

44 (iv) Monitor within 24 hours (with a portable VOC detection
45 device) or repair within 15 days any pump seal from which liquids
46 are observed dripping;

47 (v) Monitor any relief valve within 24 hours after it has
48 been vented to the atmosphere;

49 (vi) Monitor immediately after repair any component that was
50 found leaking;

51 (vii) For all other valves considered "unsafe-to-monitor" or
52 inaccessible during an annual inspection, the owner or operator

1 shall document to the executive secretary the number of valves
2 considered "unsafe-to-monitor" or inaccessible, the dangers
3 involved or reasons for inaccessibility, the location of these
4 valves, and the procedures that the owner or operator shall follow
5 to ensure that the valves do not leak. The documentation for each
6 calendar year shall be submitted for approval to the executive
7 secretary 15 days after the last day of each calendar year. At a
8 minimum, the inaccessible valves shall be monitored at least once
9 per year (annually).

10 (b) For the purpose of R307-326, gaseous service for
11 pipeline valves and pressure relief valves is defined as the VOCs
12 being gaseous at conditions that prevail in the components during
13 normal operations. Pipeline valves and pressure relief valves in
14 gaseous service and other components subject to leaks shall be
15 noted or marked so that their location within the refinery complex
16 is obvious to the refinery operator performing the monitoring and
17 to the State of Utah, Division of Air Quality.

18 (4) Exemptions. The following are exempt from the monitoring
19 requirements of (3) above:

20 (a) Pressure relief devices that are connected to an
21 operating flare header, firebox, or vapor recovery devices,
22 storage tank valves, and valves that are not externally regulated;

23 (b) Refinery equipment containing a stream composition less
24 than 10 percent by weight VOCs; and

25 (c) Refinery equipment containing natural gas supplied by a
26 public utility as defined by the Utah Public Service Commission.

27 (5) Alternate Monitoring Methods and Requirements.

28 (a) If at any time after two complete liquid service
29 inspections and five complete gaseous service inspections, the
30 owner or operator of a petroleum refinery can demonstrate that
31 modifications to (3) above are in order, he may apply in writing
32 to the Air Quality Board for a variance from the requirements of
33 (3) above.

34 (b) This submittal shall include data that have been
35 developed to justify the modification to (3) above. As a minimum,
36 the submittal should contain the following information:

37 (i) the name and address of the company;

38 (ii) the name and telephone number of the responsible
39 company representative;

40 (iii) a description of the proposed alternate monitoring
41 procedures; and

42 (iv) a description of the proposed alternate operational or
43 equipment controls.

44 (6) Recording Requirements. Identified leaks shall be noted
45 and affixed with a readily visible and weatherproof tag bearing
46 the identification of the leak and the date the leak was detected.

47 The tag shall remain in place until the leaking component is
48 repaired. The presence of the leak shall also be noted in a log
49 maintained by the operator or owner of the refinery. The log
50 shall contain, at a minimum, the name of the process unit where
51 the component is located, the type of component, the tag number,
52 the date the leak is detected, the date repaired, and the date and

1 instrument reading when the recheck of the component is made. The
2 log should also indicate those leaks that cannot be repaired until
3 turnaround, and summarize the total number of components found
4 leaking. The operator or owner of the refinery complex shall
5 retain the leak detection log for two years after the leak has
6 been repaired and shall make the log available to the executive
7 secretary upon request.

8 (7) Reporting Requirements. The operator or owner of a
9 petroleum refinery complex shall submit a report to the executive
10 secretary by the 15th day of January, April, July, and October of
11 each year listing the total number of components inspected, all
12 leaks that have been located during the previous 3 calendar months
13 but not repaired within 15 days, all leaking components awaiting
14 unit turnaround and the total number of components found leaking.

15 In addition, the refinery operator or owner shall submit a signed
16 statement with each report that all monitoring has been performed
17 as stipulated in R307-326-9.

18 (8) Additional Requirements. Any time a valve, with the
19 exception of safety pressure relief valves, is located at the end
20 of a pipe or line containing VOCs, the end of the line shall be
21 sealed with one of the following: a second valve, a blind flange,
22 a plug or a cap. This sealing device shall only be removed when
23 the line is in use for sampling.

24 25 **R307-326-10. Alternate Methods of Control.**

26 (1) Any person may apply to the executive secretary for
27 approval of an alternate test method, an alternate method of
28 control, an alternate compliance period, an alternate emission
29 limit, or an alternate monitoring schedule. The application must
30 include a demonstration that the proposed alternate produces an
31 equal or greater air quality benefit than that required by R307-
32 326, or that the alternate test method is equivalent to that
33 required by these rules. The executive secretary shall obtain
34 concurrence from EPA when approving an alternate test method, an
35 alternate method of control, an alternate compliance period, an
36 alternate emission limit, or an alternate monitoring schedule.

37 (2) Manufacturer's operational specifications, records, and
38 testings of any control system shall use the applicable EPA
39 Reference Methods of 40 CFR Part 60, the most recent EPA test
40 methods, or EPA-approved state methods, to determine the
41 efficiency of the control device. In addition, the owner or
42 operator must meet the applicable requirements of record keeping
43 for any control device. A record of all tests, monitoring, and
44 inspections required by R307-326 shall be maintained by the owner
45 or operator for a minimum of 2 years and shall be made available
46 to the executive secretary or the executive secretary's
47 representative upon request. Any malfunctioning control device
48 shall be repaired within 15 calendar days after it is found by the
49 owner or operator to be malfunctioning, unless otherwise approved
50 by the executive secretary.

51 (3) For purposes of determining compliance with emission
52 limits, VOCs and nitrogen oxides will be measured by the test

1 methods identified in federal regulation or approved by the
2 executive secretary. Where such a method also inadvertently
3 measures compounds with negligible photochemical reactivity, an
4 owner or operator may exclude these negligibly reactive compounds
5 when determining compliance with an emissions standard.
6

7 **R307-326-11. Compliance Schedule.**

8 All sources within any newly designated nonattainment area
9 for ozone shall be in compliance with this rule within 180 days of
10 the effective date of designation to nonattainment.
11

12 **KEY: air pollution, refinery, gasoline, ozone**

13 **Date of Enactment or Last Substantive Amendment: 200[6]7**

14 **Notice of Continuation: August 1, 2003**

15 **Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-**
16 **104(1) (a)**
17
18

Original Proposal for R307-327

(6) Recording Requirements. Identified leaks shall be noted and affixed with a readily visible and weatherproof tag bearing the identification of the leak and the date the leak was detected. The tag shall remain in place until the leaking component is repaired. The presence of the leak shall also be noted in a log maintained by the operator or owner of the refinery. The log shall contain, at a minimum, the name of the process unit where the component is located, the type of component, the tag number, the date the leak [was]is detected, the date repaired, and the date and instrument reading when the recheck of the component is made. The log should also indicate those leaks [which]that cannot be repaired until turnaround, and summarize the total number of components found leaking. The operator or owner of the refinery complex shall retain the leak detection log for two years after the leak has been repaired and shall make the log available to the executive secretary upon request.

(7) Reporting Requirements. The operator or owner of a petroleum refinery complex shall submit a report to the executive secretary by the 15th day of January, April, July, and October of each year listing the total number of components inspected, all leaks that have been located during the previous 3 calendar months but not repaired within 15 days, all leaking components awaiting unit turnaround and the total number of components found leaking. In addition, the refinery operator or owner shall submit a signed statement with each report that all monitoring has been performed as stipulated in R307-326-[7]9.

(8) Additional Requirements. Any time a valve, with the exception of safety pressure relief valves, is located at the end of a pipe or line containing VOC, the end of the line shall be sealed with one of the following: a second valve, a blind flange, a plug or a cap. This sealing device shall only be removed when the line is in use for sampling.

R307-326-10. Alternate Methods of Control.

(1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-326, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.

(2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all tests, monitoring, and inspections required by R307-326 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, VOCs and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude

these negligibly reactive compounds when determining compliance with an emissions standard.

R307-326-11. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, refinery, gasoline, ozone

Date of Enactment or Last Substantive Amendment: [September 15, 1998]2006

Notice of Continuation: August 1, 2003

Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104(1)(a)

Environmental Quality, Air Quality **R307-327** Davis and Salt Lake Counties and Ozone Nonattainment Areas: Petroleum Liquid Storage

NOTICE OF PROPOSED RULE (Amendment)

DAR FILE No.: 29004

FILED: 09/07/2006, 16:05

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-328, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-327 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-327. In addition, the applicability, testing, and compliance provisions that were located in Section R307-325-1 were moved into Rule R307-327. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

- ❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ OTHER PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY

AIR QUALITY

150 N 1950 W

SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-327. ~~[Davis and Salt Lake Counties and]~~ Ozone Nonattainment and Maintenance Areas: Petroleum Liquid Storage.

R307-327-1. Purpose.

The purpose of R307-327 is to establish Reasonably Available Control Technology (RACT), as required by section 182(2)(A) of the Clean Air Act, for refineries and petroleum liquid storage facilities that are located in any ozone nonattainment or maintenance area. The rule is based on federal control technique guidance documents.

R307-327-2. Applicability.

R307-327 applies to the owner or operator of any refinery or petroleum liquid storage facility located in any ozone nonattainment or maintenance area.

R307-327-[1]3. [Applicability and] Definitions.

[(1)] R307-325 establishes applicability and general requirements for R307-327.

—(2)—The following additional definitions apply to R307-327:
"Average Monthly Storage Temperature" means the average daily storage temperature measured over a period of one month.

"Waxy, Heavy Pour Crude Oil" means a crude oil with a pour point of 50 degrees F or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for pourpoint of petroleum oils."

R307-327-4. General Requirements.

[(3)](1) Any existing stationary storage tank, reservoir or other container with a capacity greater than 40,000 gallons (150,000 liters) [which] that is used to store volatile petroleum liquids with a true vapor pressure greater than 10.5 kilo pascals (kPa) (1.52 psia) at storage temperature shall be fitted with control equipment [which] that will minimize vapor loss to the atmosphere. S[ueh-s] storage tanks, except [storage tanks] those erected before January 1, 1979, which are equipped with external floating roofs, shall be fitted with an internal floating roof [which] that shall rest on the surface of the liquid contents and shall be equipped with a closure seal or seals to close the space between the roof edge and the tank wall, or alternative equivalent controls, provided the design and effectiveness of such equipment is documented and submitted to and approved by the executive secretary. The owner or operator shall maintain a record of the type and maximum true vapor pressure of stored liquid.

[(4)](2) The owner or operator of a petroleum liquid storage tank not subject to [(3)](1) above, but containing a petroleum liquid with a true vapor pressure greater than 7.0 kPa (1.0 psia), shall maintain records of the average monthly storage temperature, the type of liquid, throughput quantities, and the maximum true vapor pressure.

R307-327-[2]5. Installation and Maintenance.

(1) The owner or operator shall ensure that all control equipment on storage vessels [shall be] is properly installed and maintained.

(a) There shall be no visible holes, tears or other openings in any seal or seal fabric and[;] all openings, except stub drains, shall be equipped with covers, lids, or seals.

(b) All openings in floating roof tanks, except for automatic bleeder vents, rim space vents, and leg sleeves, shall provide a projection below the liquid surface.

(c) The openings shall be equipped with a cover, seal, or lid.

(d) The cover, seal, or lid is to be in a closed position at all times except when the device is in actual use.

(e) Automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports. Rim vents shall be set to open when the roof is being float[ing]ed off the leg supports or at the manufacturer's recommended setting.

(f) Any emergency roof drain shall be provided with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the area of the opening.

(2) The owner or operator shall conduct routine inspections from the top of the tank for external floating roofs or through roof hatches for internal floating roofs at six month or shorter intervals to insure there are no holes, tears, or other openings in the seal or seal fabric.

- (a) The cover must be uniformly floating on or above the liquid and there must be no visible defects in the surface of the cover or petroleum liquid accumulated on the cover.
- (b) The seal(s) must be intact and uniformly in place around the circumference of the cover between the cover and tank wall.
- (3) A close visible inspection of the primary seal of an external floating roof is to be conducted at least once per year from the roof top unless such inspection requires detaching the secondary seal, which would result in damage to the seal system.
- (4) Whenever a tank is emptied and degassed for maintenance, an emergency, or any other similar purpose, a close visible inspection of the cover and seals ~~is to~~ shall be made.
- (5) The executive secretary must be notified 7 days prior to the refilling of a tank ~~which~~ that has been emptied, degassed for maintenance, an emergency, or any other similar purpose. Any non-compliance with this ~~regulation~~ rule must be corrected before the tank is refilled.

R307-327-[3]6. Retrofits for Floating Roof Tanks.

- (1) Except where specifically exempted in (3) below, all existing external floating roof tanks with capacities greater than 950 barrels (40,000 gals) shall be retrofitted with a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary seal) if:
 - (a) The tank is a welded tank, the true vapor pressure of the contained liquid is 27.6 kPa (4.0 psia) or greater and the primary seal is one of the following:
 - (i) A metallic type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid-filled seal, or
 - (ii) Any other primary seals ~~which~~ that can be demonstrated equivalent to the above primary seals.
 - (b) The tank is a riveted tank, the true vapor pressure of the contained liquid is 10.5 kPa (1.5 psia) or greater, and the primary seal is as described in (a) above.
 - (c) The tank is a welded or riveted tank, the true vapor pressure of the contained liquid is 10.5 kPa (1.5 psia) or greater and the primary seal is vapor-mounted. When such primary seal closure device can be demonstrated equivalent to the primary seals described in (a) above, these processes apply.
- (2) The owner or operator of a storage tank subject to this rule shall ensure that all the seal closure devices ~~shall~~ meet the following requirements:
 - (a) There shall be no visible holes, tears, or other openings in the seals or seal fabric.
 - (b) The seals must be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.
 - (c) For vapor mounted primary seals, the accumulated area of gaps between the secondary seal and the tank wall shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per ft. of tank diameter) and the width of any gap shall not exceed 1.27 cm (1/2 in.). The owner or operator shall measure the secondary seal gap annually and make a record of the measurement.
- (3) The following are specifically exempted from the requirements of (1) above:
 - (a) External floating roof tanks having capacities less than 10,000 barrels (420,000 gals) used to store produced crude oil and condensate prior to custody transfer.

- (b) A metallic type shoe seal in a welded tank ~~which~~ that has a secondary seal from the top of the shoe seal to the tank wall (a shoe mounted secondary seal).
- (c) External floating roof tanks storing waxy, heavy pour crudes.
- (d) External floating roof tanks with a closure seal device or other devices installed ~~which~~ that will control volatile organic compounds (VOC) emissions with an effectiveness equal to or greater than the seals required in (1) above. It shall be the responsibility of the owner or operator of the source to demonstrate the effectiveness of the alternative seals or devices to the executive secretary. No exemption under (3) shall be granted until the alternative seals or devices are approved by the executive secretary.

R307-327-7. Alternate Methods of Control.

- (1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-327, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.
- (2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all tests, monitoring, and inspections required by R307-327 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.
- (3) For purposes of determining compliance with emission limits, VOCs and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

R307-327-8. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, petroleum, gasoline, ozone
Date of Enactment or Last Substantive Amendment: [September 15, 1998]2006
Notice of Continuation: August 1, 2003
Authorizing, and Implemented or Interpreted Law: [19-2-104; 19-2-104(1)(a)]

Change to Proposed Rule R307-327

R307. Environmental Quality, Air Quality.**R307-327. Ozone Nonattainment and Maintenance Areas: Petroleum Liquid Storage.****R307-327-1. Purpose.**

The purpose of R307-327 is to establish Reasonably Available Control Technology (RACT), as required by section 182(2)(A) of the Clean Air Act, for petroleum refineries and petroleum liquid storage facilities that are located in any ozone nonattainment or maintenance area. The rule is based on federal control technique guidance documents.

R307-327-2. Applicability.

R307-327 applies to the owner or operator of any petroleum refinery or petroleum liquid storage facility located in any ozone nonattainment or maintenance area.

R307-327-3. Definitions.

The following additional definitions apply to R307-327:

"Average Monthly Storage Temperature" means the average daily storage temperature measured over a period of one month.

"Waxy, Heavy Pour Crude Oil" means a crude oil with a pour point of 50 degrees F or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for pourpoint of petroleum oils."

R307-327-4. General Requirements.

(1) Any existing stationary storage tank, reservoir or other container with a capacity greater than 40,000 gallons (150,000 liters) that is used to store volatile petroleum liquids with a true vapor pressure greater than 10.5 kilo pascals (kPa) (1.52 psia) at storage temperature shall be fitted with control equipment that will minimize vapor loss to the atmosphere. Storage tanks, except those erected before January 1, 1979, which are equipped with external floating roofs, shall be fitted with an internal floating roof that shall rest on the surface of the liquid contents and shall be equipped with a closure seal or seals to close the space between the roof edge and the tank wall, or alternative equivalent controls, provided the design and effectiveness of such equipment is documented and submitted to and approved by the executive secretary. The owner or operator shall maintain a record of the type and maximum true vapor pressure of stored liquid.

(2) The owner or operator of a petroleum liquid storage tank not subject to (1) above, but containing a petroleum liquid with a true vapor pressure greater than 7.0 kPa (1.0 psia), shall maintain records of the average monthly storage temperature, the type of liquid, throughput quantities, and the maximum true vapor pressure.

R307-327-5. Installation and Maintenance.

(1) The owner or operator shall ensure that all control equipment on storage vessels is properly installed and maintained.

1 (a) There shall be no visible holes, tears or other openings
2 in any seal or seal fabric and all openings, except stub drains,
3 shall be equipped with covers, lids, or seals.

4 (b) All openings in floating roof tanks, except for
5 automatic bleeder vents, rim space vents, and leg sleeves, shall
6 provide a projection below the liquid surface.

7 (c) The openings shall be equipped with a cover, seal, or
8 lid.

9 (d) The cover, seal, or lid is to be in a closed position at
10 all times except when the device is in actual use.

11 (e) Automatic bleeder vents shall be closed at all times
12 except when the roof is floated off or landed on the roof leg
13 supports. Rim vents shall be set to open when the roof is being
14 floated off the leg supports or at the manufacturer's recommended
15 setting.

16 (f) Any emergency roof drain shall be provided with a
17 slotted membrane fabric cover or equivalent cover that covers at
18 least 90 percent of the area of the opening.

19 (2) The owner or operator shall conduct routine inspections
20 from the top of the tank for external floating roofs or through
21 roof hatches for internal floating roofs at six month or shorter
22 intervals to insure there are no holes, tears, or other openings
23 in the seal or seal fabric.

24 (a) The cover must be uniformly floating on or above the
25 liquid and there must be no visible defects in the surface of the
26 cover or petroleum liquid accumulated on the cover.

27 (b) The seal(s) must be intact and uniformly in place around
28 the circumference of the cover between the cover and tank wall.

29 (3) A close visible inspection of the primary seal of an
30 external floating roof is to be conducted at least once per year
31 from the roof top unless such inspection requires detaching the
32 secondary seal, which would result in damage to the seal system.

33 (4) Whenever a tank is emptied and degassed for maintenance,
34 an emergency, or any other similar purpose, a close visible
35 inspection of the cover and seals shall be made.

36 (5) The executive secretary must be notified 7 days prior to
37 the refilling of a tank that has been emptied, degassed for
38 maintenance, an emergency, or any other similar purpose. Any non-
39 compliance with this rule must be corrected before the tank is
40 refilled.

41 42 **R307-327-6. Retrofits for Floating Roof Tanks.**

43 (1) Except where specifically exempted in (3) below, all
44 existing external floating roof tanks with capacities greater than
45 950 barrels (40,000 gals) shall be retrofitted with a continuous
46 secondary seal extending from the floating roof to the tank wall
47 (a rim-mounted secondary seal) if:

48 (a) The tank is a welded tank, the true vapor pressure of
49 the contained liquid is 27.6 kPa (4.0 psia) or greater and the
50 primary seal is one of the following:

51 (i) A metallic type shoe seal, a liquid-mounted foam seal, a
52 liquid-mounted liquid-filled seal, or

53 (ii) Any other primary seals that can be demonstrated

equivalent to the above primary seals.

(b) The tank is a riveted tank, the true vapor pressure of the contained liquid is 10.5 kPa (1.5 psia) or greater, and the primary seal is as described in (a) above.

(c) The tank is a welded or riveted tank, the true vapor pressure of the contained liquid is 10.5 kPa (1.5 psia) or greater and the primary seal is vapor-mounted. When such primary seal closure device can be demonstrated equivalent to the primary seals described in (a) above, these processes apply.

(2) The owner or operator of a storage tank subject to this rule shall ensure that all the seal closure devices meet the following requirements:

(a) There shall be no visible holes, tears, or other openings in the seals or seal fabric.

(b) The seals must be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

(c) For vapor mounted primary seals, the accumulated area of gaps between the secondary seal and the tank wall shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per ft. of tank diameter) and the width of any gap shall not exceed 1.27 cm (1/2 in.). The owner or operator shall measure the secondary seal gap annually and make a record of the measurement.

(3) The following are specifically exempted from the requirements of (1) above:

(a) External floating roof tanks having capacities less than 10,000 barrels (420,000 gals) used to store produced crude oil and condensate prior to custody transfer.

(b) A metallic type shoe seal in a welded tank that has a secondary seal from the top of the shoe seal to the tank wall (a shoe mounted secondary seal).

(c) External floating roof tanks storing waxy, heavy pour crudes.

(d) External floating roof tanks with a closure seal device or other devices installed that will control volatile organic compounds (VOC) emissions with an effectiveness equal to or greater than the seals required in (1) above. It shall be the responsibility of the owner or operator of the source to demonstrate the effectiveness of the alternative seals or devices to the executive secretary. No exemption under (3) shall be granted until the alternative seals or devices are approved by the executive secretary.

R307-327-7. Alternate Methods of Control.

[+](1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-327, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an

1 alternate method of control, an alternate compliance period, an
2 alternate emission limit, or an alternate monitoring schedule.

3 (2) Manufacturer's operational specifications, records, and
4 testings of any control system shall use the applicable EPA
5 Reference Methods of 40 CFR Part 60, the most recent EPA test
6 methods, or EPA-approved state methods, to determine the
7 efficiency of the control device. In addition, the owner or
8 operator must meet the applicable requirements of record keeping
9 for any control device. A record of all tests, monitoring, and
10 inspections required by R307-327 shall be maintained by the owner
11 or operator for a minimum of 2 years and shall be made available
12 to the executive secretary or the executive secretary's
13 representative upon request. Any malfunctioning control device
14 shall be repaired within 15 calendar days after it is found by the
15 owner or operator to be malfunctioning, unless otherwise approved
16 by the executive secretary.

17 (3) For purposes of determining compliance with emission
18 limits, VOCs and nitrogen oxides will be measured by the test
19 methods identified in federal regulation or approved by the
20 executive secretary. Where such a method also inadvertently
21 measures compounds with negligible photochemical reactivity, an
22 owner or operator may exclude these negligibly reactive compounds
23 when determining compliance with an emissions standard.

24 25 **R307-327-8. Compliance Schedule.**

26 All sources within any newly designated nonattainment area
27 for ozone shall be in compliance with this rule within 180 days of
28 the effective date of designation to nonattainment.

29
30 **KEY: air pollution, petroleum, gasoline, ozone**

31 **Date of Enactment or Last Substantive Amendment: 200[6]7**

32 **Notice of Continuation: August 1, 2003**

33 **Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)**

34
35

Original Proposal for R307-328

Environmental Quality, Air Quality
R307-328
Davis, Salt Lake, Utah, and Weber
Counties and Ozone Nonattainment
Areas: Gasoline Transfer and Storage

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE No.: 29005

FILED: 09/07/2006, 16:06

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, clarifying distinction between Rules R307-342 and R307-328, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-332, R307-335, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: Rules R307-328 and R307-342 work together to establish the Stage I Vapor Recovery requirements. In general, the provisions in Rule R307-328 apply to the refinery or bulk storage plant where gasoline is loaded into a truck for delivery, the transport vehicle, and the gas station where the gasoline is unloaded into the underground storage tank. Rule R307-342 establishes the requirements for the vapor tightness testing contractor. However, there are some provisions that do not follow this general split. Both rules have been revised to make this division clearer, so that each entity will find all of the applicable requirements in one rule, rather than split between two rules. In addition, references to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-328 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-328. Further, the applicability, testing, and compliance provisions that were located in Section R307-325-1 were moved into Rule R307-328. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

- ❖ **THE STATE BUDGET:** Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ **LOCAL GOVERNMENTS:** Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ **OTHER PERSONS:** Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.
R307-328. [~~Davis, Salt Lake, Utah and Weber Counties and~~
~~]Ozone Nonattainment and Maintenance Areas and Utah and~~
~~Weber Counties: Gasoline Transfer and Storage.~~

R307-328-1. Purpose.

The purpose of R307-328 is to establish Reasonably Available Control Technology (RACT) for control of gasoline vapors during the filling of gasoline transport vehicles and storage tanks in ozone non-attainment and maintenance areas and Utah and Weber Counties. The rule is based on federal control technique guidance documents. This requirement is commonly referred to as stage I vapor recovery.

R307-328-[1]2. Applicability[and Definitions].**[(1)-Applicability.]**

—(a)(1) Transport Vehicles. R307-328 applies to the owner or operator of any gasoline tank truck, railroad tank car, or other gasoline transport vehicle that loads or unloads gasoline in ~~in [Davis, Salt Lake,] Utah or Weber County or any ozone nonattainment or maintenance area.~~

[(b)(2) Gasoline Dispensing. R307-328 applies to the owner or operator of any bulk terminal, bulk plant, or service station located in ~~[Davis, Salt Lake,] Utah[.]~~ or Weber County or any ozone nonattainment or maintenance area.]

—(2) R307-325 establishes general requirements for R307-328.]

R307-328-3. Definitions.

[(3)-]The following additional definitions apply to R307-328[.].

"Bottom Filling" means the filling of a tank through an inlet at or near the bottom of the tank designed to have the opening covered by the liquid after the pipe normally used to withdraw liquid can no longer withdraw any liquid.

"Qualified contractor" means a contractor who has been qualified by the executive secretary in accordance with R307-342 to perform vapor tightness tests on gasoline transport vehicles.

"Submerged Fill Pipe" means any fill pipe with a discharge opening which is entirely submerged when the liquid level is 6 inches above the bottom of the tank and the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.

[R307-328-2. Compliance Schedule.

—(1) Sources located in Davis and Salt Lake Counties are subject to the compliance schedule in R307-325-4.

—(2) Sources located in Utah and Weber Counties shall be in compliance with R307-328 by May 1, 2000. The executive secretary may grant a one-year waiver from this compliance schedule if the source submits adequate documentation that the compliance date would create undue hardship.

—(3) Sources located in any other area that is designated nonattainment for ozone shall be in compliance within six months of the date the EPA designates the area nonattainment.

R307-328-[3]4. Loading of Tank Trucks, Trailers, Railroad Tank Cars, and Other Transport Vehicles.

(1) No person shall load or permit the loading of gasoline into any tank truck, trailer, railroad tank car, or other transport vehicle unless the emissions from such vehicle are controlled by use of a vapor collection and control system and submerged or bottom filling. ~~[Reasonably available control technology]~~ RACT shall be required and in no case shall vapor emissions to the atmosphere exceed 0.640 pounds per 1,000 gallons transferred.

(2) Such vapor collection and control system shall be properly installed and maintained.

(3) The loading device shall not leak.

(4) The loading device shall utilize the dry-break loading design couplings and shall be maintained and operated to allow no more than an average of 15 cc drainage per disconnect for 5 consecutive disconnects.

(5) All loading and vapor lines shall be equipped with fittings which make a vapor tight connection and shall automatically close upon disconnection to prevent release of the organic material.

(6) A gasoline storage and transfer installation that receives inbound loads and dispatches outbound loads ("bulk plant") need not

comply with R307-328-[3]4 if it does not have a daily average throughput of more than 3,900 gallons (15,000 or more liters) of gasoline based upon a 30-day rolling average. Such installations shall on-load and off-load gasoline by use of bottom or submerged filling or alternative equivalent methods. The emission limitation is based on operating procedures and equipment specifications using Reasonably Available Control Technology as defined in EPA documents EPA 450/2-77-026 October 1977, "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals," and EPA-450/2-77-035 December 1977, "Control of Volatile Organic Emissions from Bulk Gasoline Plants." The design effectiveness of such equipment and the operating procedures must be documented and submitted to and approved by the executive secretary.

(7) Hatches of transport vehicles shall not be opened at any time during loading operations except to avoid emergency situations or during emergency situations. Pressure relief valves on storage tanks and transport vehicles shall be set to release at the highest possible pressure, in accordance with State or local fire codes and National Fire Prevention Association guidelines. Pressure in the vapor collection system shall not exceed the transport vehicle pressure relief setting.

(8) Each owner or operator of a gasoline storage and dispensing installation shall conduct testing of vapor collection systems used at such installation and shall maintain records of all tests for no less than two years. Testing procedures of vapor collection systems shall be approved by the executive secretary and shall be consistent with the procedures described in the EPA document, "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems," EPA-450/2-78-051.

(9) Semi-annual testing shall be conducted and records maintained of such test. The frequency of tests may be altered by the executive secretary upon submittal of documentation which would justify a change.

(10) The vapor collection and vapor processing equipment shall be designed and operated to prevent gauge pressure in the delivery vessel from exceeding 18 inches of water and prevent vacuum from exceeding 6 inches of water. During testing and monitoring, there shall be no reading greater than or equal to 100 percent of the lower explosive limit measured at 1.04 inches around the perimeter of a potential leak source as detected by a combustible gas detector. Potential leak sources include, but are not limited to, piping, seals, hoses, connections, pressure or vacuum vents, and vapor hoods. In addition, no visible liquid leaks are permitted during testing or monitoring.

R307-328-[4]5. Stationary Source Container Loading.

(1) No person shall transfer or permit the transfer of gasoline from any delivery vessel (i.e. tank truck or trailer) into any stationary storage container with a capacity of 250 gallons or greater unless such container is equipped with a submerged fill pipe and at least 90 percent of the gasoline vapor, by weight, displaced during the filling of the stationary storage container is prevented from being released to the atmosphere. This requirement shall not apply to:

(a) the transfer of gasoline into any stationary storage container of less than 550 gallons used primarily for the fueling of implements of husbandry if such container is equipped with a permanent submerged fill pipe;

(b) the transfer of gasoline into any stationary storage container having a capacity of less than 2,000 gallons which was installed prior to January 1, 1979, if such container is equipped with a permanent submerged fill pipe;

(c) the transfer of gasoline to storage tanks equipped with floating roofs or their equivalent which have been approved by the executive secretary.

(2) The 90 percent performance standard of the vapor control system shall be based on operating procedures and equipment specifications. The design effectiveness of such equipment and the operating procedure must be documented and submitted to and approved by the executive secretary.

(3) Each owner or operator of a gasoline storage tank or the owner or operator of the gasoline delivery vessel subject to (1) above shall install vapor control equipment, which includes, but is not limited to:

(a) vapor return lines and connections sufficiently free of restrictions to allow transfer of vapor to the delivery vessel or to the vapor control system, and to achieve the required recovery;

(b) a means of assuring that the vapor return lines are connected to the delivery vessel, or vapor control system, and storage tank during tank filling;

(c) restrictions in the storage tank vent line designed and operated to prevent:

(i) the release of gasoline vapors to the atmosphere during normal operation; and

(ii) gauge pressure in the delivery vessel from exceeding 18 inches of water and vacuum from exceeding 6 inches of water.

R307-328-[5]6. Transport Vehicles.

(1) Gasoline transport vehicles must be designed and maintained to be vapor tight during loading and unloading operations as well as during transport, except for normal pressure venting required under United States Department of Transportation Regulations.

(2) The design of the vapor recovery system shall be such that when the delivery tank is connected to an approved storage tank vapor recovery system or loading terminal, 90% vapor recovery efficiencies are realized. The connectors of the delivery tanks shall be compatible with the fittings on the fill pipes and vapor vents at the storage containers and gasoline loading terminals where the delivery tank will service or be serviced. Adapters may be used to achieve compatibility.

(2)(3) No person shall knowingly allow the introduction of gasoline into, dispensing of gasoline from, or transportation of gasoline in a gasoline transport vehicle without a current Utah Vapor Tightness Certificate.

(3)(4) A vapor-laden transport vehicle may be refilled only at installations equipped to recover, process or dispose of vapors. Transport vehicles ~~which~~ that only service locations with storage containers specifically exempted from the requirements of R307-328-[4]5 need not be retrofitted to comply with R307-328-[5]6(1)-(3) above, provided such transport vehicles are loaded through a submerged fill pipe or equivalent equipment provided the design and effectiveness of such equipment are documented and submitted to and approved by the executive secretary.

R307-328-[6]7. Leak Tight Testing.

(1) Gasoline tank trucks and their vapor collection systems shall be tested for leakage by a qualified contractor using procedures approved by the executive secretary and consistent with the procedures described in R307-342.

(2) Gasoline tank trucks and their vapor collection systems shall be tested for leakage annually between December 1 and May 1.

(3) The tank shall not sustain a pressure change of more than 750 pascals (3 inches of H₂O) in five minutes when pressurized (by air or

inert gas) to 4500 pascals (18 inches of H₂O) or evacuated to 1500 pascals (6 inches of H₂O).

(4) No visible liquid leaks are permitted during testing.

(5) Gasoline tank trucks shall be certified leak tight at least annually by a qualified contractor approved by the executive secretary.

(6) Each owner or operator of a gasoline tank truck shall have in his possession a valid vapor tightness certification, which:

(a) shows the date that the gasoline tank truck last passed the Utah vapor tightness certification test; and

(b) shows the identification number of the gasoline tank truck.

(7) Records of certification inspections, as well as any maintenance performed, shall be retained by the owner or operator of the tank truck for a two year period and be available for review by the executive secretary or ~~his~~ the executive secretary's representative.

R307-328-8. Alternate Methods of Control.

(1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-328, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.

(2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all tests, monitoring, and inspections required by R307-328 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, volatile organic compounds and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

R307-328-9. Compliance Schedule.

Sources located within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, gasoline transport, ozone

Date of Enactment or Last Substantive Amendment: ~~July 15, 1999~~ 2006

Notice of Continuation: August 5, 2003

Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104(1)(a)

Original Proposal for R307-335

— (a) The label letters shall be in block letters of no less than 20-point type, at least 1/16 inch stroke (width of type), and of a color that contrasts with the label background color.

— (b) The label shall be affixed to the front upper half of the vertical surface of the gasoline pump on each side with gallonage and dollar amount meters from which gasoline can be dispensed and shall be clearly readable to the pump user.

— (c) Information on the label shall include:

— (i) a general explanation of how the Stage II vapor recovery system works and how it should be operated;

— (ii) notice that the user should not attempt to overfill the motor vehicle gas tank;

— (iii) notice that the purpose of Stage II vapor recovery systems is to minimize gasoline emissions from motor vehicle refueling; and

— (iv) the name and telephone number of the Division of Air Quality.

R307-332-10. Self-Inspections.

— (1) The owner or operator of an installation shall ensure that the following tests and inspections are performed as specified:

— (a) After notification as specified in R307-332-11, one of the tests specified in R307-332-5(3)(a) or another test or tests approved by the executive secretary and EPA, shall be conducted for every Stage II vapor recovery system at each installation every third year after the initial test required by R307-332-5(3)(a) or at any installation that the executive secretary has any indication that leaks may exist.

— (b) After notification as specified in R307-332-11, the test specified in R307-332-5(3)(b), the AQD Dynamic Back Pressure Test, or another test or tests approved by the executive secretary and EPA, shall be conducted for every Stage II vapor recovery system at each installation every fourth year after the initial test required by R307-332-5(3)(b) or at any installation that the executive secretary has any indication that a blockage may exist.

— (c) After notification as specified in R307-332-11, a functional test shall be conducted every year on any and all auto shut-off mechanisms and flow prohibiting mechanisms on all dispensing nozzles to determine if the mechanisms are functional.

— (d) Visual inspections shall be conducted at a frequency sufficient to ensure:

— (i) that all the Stage II vapor recovery equipment is present, is maintained in the certified configuration, and is in proper working order, including, but not limited to: nozzles and nozzle parts (facecone, bellows, springs, latches, check valves), hoses and hose hanger/retractors, flow limiters, swivels, collection units, control panels, system pumps, processing units, vent pipes and any and all other system related parts;

— (ii) compliance with all Stage II vapor recovery system label requirements as specified in R307-332-9; and

— (iii) that all Stage II vapor recovery system equipment is being operated properly, including dispensing units, processors, handling units, and any other system related equipment.

— (2) Stage II vapor recovery systems or portions of Stage II vapor recovery systems found to be malfunctioning shall be taken out of service until repaired.

R307-332-11. Test Notification Requirements.

— (1) The owner or operator of an installation shall notify the executive secretary in writing at least thirty days before conducting a test to comply with R307-332-5(3) or (4), or R307-332-10(1)(a), (b) or (c).

— (2) The notification required in (1) above shall include:

— (a) the name, address, and phone number of the installation;

— (b) the name of the test;

— (c) the name and telephone number of the person that will conduct the test; and

— (d) the time and date on which the test shall be conducted.

— (3) If the results of a test listed in (1) above do not show compliance with standards specified in the appropriate test specification, the owner or operator of an installation shall notify the executive secretary by five P.M. on the first working day after the test. Notification shall include the name, address, and phone number of the installation and the name of the test.

KEY: air pollution, motor vehicles, gasoline, ozone

Date of Enactment or Last Substantive Amendment: September 15, 1998

Notice of Continuation: August 5, 2003

Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104]

Environmental Quality, Air Quality **R307-335**

Davis and Salt Lake Counties and Ozone Nonattainment Areas: Degreasing and Solvent Cleaning Operations

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE NO.: 29008

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-340, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-335 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-335. In addition, the applicability, testing, and

compliance provisions that were located in Section R307-325-1 were moved into Rule R307-335. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

- ❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ OTHER PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-335. ~~[Davis and Salt Lake Counties and]Ozone Nonattainment and Maintenance Areas: Degreasing and Solvent Cleaning Operations.~~

R307-335-1. Purpose.

The purpose of this rule is to establish Reasonably Available Control Technology (RACT) for degreasing and solvent cleaning operations that are located in an ozone nonattainment or maintenance area. The rule is based on federal control technique guidance documents.

R307-335-2. Applicability.

R307-335 applies to all degreasing or solvent cleaning operations that use volatile organic compounds (VOCs) and are located in any ozone nonattainment or maintenance area.

R307-335-1[3]. ~~[Applicability and]Definitions.~~

~~[(1) The provisions of this section are applicable to the use of all volatile organic compounds.~~

~~—(2) R307-325 establishes applicability and general requirements for R307-335.~~

~~—(3)]The following additional definitions apply to R307-335:~~

"Batch Open Top Vapor Degreasing" means the batch process of cleaning and removing grease and soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

"Cold Cleaning" means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing or immersing while maintaining the solvent below its boiling point.

"Conveyorized Degreasing" means the continuous process of cleaning and removing greases and soils from metal surfaces by using either cold or vaporized solvents.

"Freeboard Ratio" means the freeboard height divided by the width of the degreaser.

"Open Top Vapor Degreaser" means the batch process of cleaning and removing soils from metal surfaces by condensing low solvent vapor on the colder metal parts.

"Separation Operation" means any process that separates a mixture of compounds and solvents into two or more components. Specific mechanisms include extraction, centrifugation, filtration, and crystallization.

"Solvent Metal Cleaning" means the process of cleaning soils from metal surfaces by cold cleaning, open top vapor degreasers, or conveyorized degreasing.

R307-335-2[4]. Cold Cleaning Facilities.

No owner or operator shall operate a degreasing or solvent cleaning operation unless ~~[the]conditions [contained in-](1) through (7)~~ below are met.

(1) A cover shall be installed which shall remain closed except during actual loading, unloading or handling of parts in cleaner. The cover shall be designed so that it can be easily operated with one hand if:

- (a) the volatility of the solvent is greater than 2 kPa (15 mm Hg or 0.3 psi) measured at 38 degrees C (100 degrees F),
- (b) the solvent is agitated, or
- (c) the solvent is heated.

(2) An internal draining rack for cleaned parts shall be installed on which parts shall be drained until all dripping ceases. If the volatility of the solvent is greater than 4.3 kPa (32 mm Hg at 38 degrees C (100 degrees F)), the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Waste or used solvent shall be stored in covered containers. Waste solvents or waste materials which contain solvents shall be disposed of by recycling, reclaiming, by incineration in an incinerator approved to process hazardous materials, or by an alternate means approved by the executive secretary.

(4) Tanks, containers and all associated equipment shall be maintained in good operating condition and leaks shall be repaired immediately or the degreaser shall be shutdown.

(5) Written procedures for the operation and maintenance of the degreasing or solvent cleaning equipment shall be permanently posted in an accessible and conspicuous location near the equipment.

(6) If the solvent volatility is greater than 4.3 kPa (33 mm Hg or 0.6 psi) measured at 38 degrees C (100 degrees F), or if solvent is heated above 50 degrees C (120 degrees F), then one of the following control devices shall be used:

- (a) freeboard that gives a freeboard ratio greater than 0.7;
- (b) water cover if the solvent is insoluble in and heavier than water;
- (c) other systems of equivalent control, such as a refrigerated chiller or carbon adsorption.

(7) If used, the solvent spray shall be a solid fluid stream at a pressure ~~which~~ that does not cause excessive splashing and may not be a fine, atomized or shower type spray.

R307-335-[3]5. Open Top Vapor Degreasers.

Owners or operators of open top vapor degreasers shall, in addition to meeting the requirements of R307-335-[2]4(3), (4) and (5),

(1) Equip the vapor degreaser with a cover that can be opened and closed without disturbing the vapor zone. The cover shall be closed except when processing work loads through the degreaser;

(2) Install one of the following control devices:

- (a) Equipment necessary to sustain:
 - (i) a freeboard ratio greater than or equal to 0.75, and
 - (ii) a powered cover if the degreaser opening is greater than 1 square meter (10 square feet),
- (b) Refrigerated chiller,
- (c) Enclosed design (cover or door opens only when the dry part is actually entering or exiting the degreaser),

(d) Carbon adsorption system, with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area when cover is open and exhausting less than 25 parts per million of solvent averaged over one complete adsorption cycle;

(3) Minimize solvent carryout by:

- (a) Racking parts to allow complete drainage,
- (b) Moving parts in and out of the degreaser at less than 3.3 meters per minute (11 feet per minute),
- (c) Holding the parts in the vapor zone at least 30 seconds or until condensation ceases,
- (d) Tipping out any pool of solvent on the cleaned parts before removal, and
- (e) Allowing the parts to dry within the degreaser for at least 15 seconds or until visibly dry.

(4) Spray parts only in or below the vapor level,

(5) Not use ventilation fans near the degreaser opening, nor provide exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) in degreaser open area, unless necessary to meet State and Federal occupational, health, and safety requirements. The exhaust ventilation flow indicated above shall be measured using EPA Reference Methods 1 and 2 of 40 CFR Part 60, or by EPA-approved equivalent state methods;

(6) Not degrease porous or absorbent materials, such as cloth, leather, wood or rope;

(7) Not allow work loads to occupy more than half of the degreaser's open top area;

(8) Ensure that solvent is not visually detectable in water exiting the water separator;

(9) Install safety switches on the following:

(a) Condenser flow switch and thermostat (shuts off sump heat if condenser coolant is either not circulating or too warm); and

(b) Spray switch (shuts off spray pump if the vapor level drops excessively, i.e., greater than 10 cm (4 inches); and

(10) Ensure that the control device specified by (2)(b) or (d) above meet the applicable requirements of R307-340-[2]4 and [13]15.

Open top vapor degreasers with an open area smaller than one square meter (10.9 square feet) are exempt from (2)(b) and (d) above.

R307-335-[4]6. Conveyorized Degreasers.

Owners and operators of conveyorized degreasers shall, in addition to meeting the requirements of R307-335-[2]4(3), (4) and (5) and R307-335-[3]5(5):

(1) Install one of the following control devices for conveyorized degreasers with an air/vapor interface equal to or greater than 2.0 square meters (21.6 square feet):

(a) Refrigerated chiller or

(b) Carbon adsorption system, with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area when downtime covers are open, and exhausting less than 25 parts per million of solvent, by volume, averaged over a complete adsorption cycle.

(2) Equip the cleaner with equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.

(3) Provide downtime covers for closing off the entrance and exit during shutdown hours. Ensure that down-time cover is placed over entrances and exits of conveyorized degreasers immediately after the conveyor and exhaust are shutdown and is removed just before they are started up.

(4) Minimize carryout emissions by racking parts for best drainage and maintaining the vertical conveyor speed at less than 3.3 meters per minute (11 feet per minute).

(5) Ensure that the control device specified by (1)(a) or (b) above meet the applicable requirements of R307-340-[2]4 and [13]15.

(6) Minimize openings: Entrances and exits should silhouette work loads so that the average clearance (between parts and the edge of the degreaser opening) is either less than 10 cm (4 inches) or less than 10% of the width of the opening.

(7) Install safety switches on the following:

(a) Condenser flow switch and thermostat - shuts off sump heat if coolant is either not circulating or too warm;

(b) Spray switch - shuts off spray pump or conveyor if the vapor level drops excessively, i.e., greater than 10 cm or (4 inches); and

(c) Vapor level control thermostat - to shuts off sump level if vapor level rises too high.

(8) Ensure that solvent is not visibly detectable in the water exiting the water separator.

R307-335-7. Alternate Methods of Control.

(1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-335, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.

(2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all tests, monitoring, and inspections required by R307-335 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, VOCs and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

R307-335-8. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, degreasing[*], solvent cleaning[*], ozone
Date of Enactment or Last Substantive Amendment: [September 15, 1998]2006

Notice of Continuation: August 5, 2003

Authorizing, and Implemented or Interpreted Law: [19-2-104; 19-2-104(1)(a)]

Environmental Quality, Air Quality
R307-340
Davis and Salt Lake Counties and
Ozone Nonattainment Areas: Surface
Coating Processes

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE No.: 29009

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-340 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-340. In addition, the applicability, testing, and compliance provisions that were located in Section R307-325-1 were moved into Rule R307-340. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

- ❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.
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COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

Original Proposal for R307-340

(8) Ensure that solvent is not visibly detectable in the water exiting the water separator.

R307-335-7. Alternate Methods of Control.

(1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-335, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.

(2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all tests, monitoring, and inspections required by R307-335 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, VOCs and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

R307-335-8. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, degreasing[*], solvent cleaning[*], ozone
Date of Enactment or Last Substantive Amendment: [September 15, 1998]2006

Notice of Continuation: August 5, 2003

Authorizing, and Implemented or Interpreted Law: [19-2-101; 19-2-104(1)(a)]

Environmental Quality, Air Quality R307-340

Davis and Salt Lake Counties and Ozone Nonattainment Areas: Surface Coating Processes

NOTICE OF PROPOSED RULE (Amendment)

DAR FILE No.: 29009

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-341, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-341 (DAR No. 29010); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-340 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-340. In addition, the applicability, testing, and compliance provisions that were located in Section R307-325-1 were moved into Rule R307-340. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

- ❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.
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COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Jan Miller or Mat E. Carlile at the above address, by phone at 801-536-4042 or 801-536-4136, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at janmiller@utah.gov or MCARLILE@utah.gov

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THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-340. ~~[Davis and Salt Lake Counties and]~~ Ozone Nonattainment and Maintenance Areas: Surface Coating Processes.

R307-340-1. Purpose.

The purpose of this rule is to establish Reasonably Available Control Technology (RACT), for surface coating operations that are located in an ozone nonattainment or maintenance area. This rule is based on federal control technique guidance documents.

R307-340-2. Applicability.

R307-340 applies to the owner or operator who applies surface coating of paper, fabric, vinyl, metal furniture, large appliance, magnet wire, flat wood, miscellaneous metal parts and products, and graphic arts in any ozone nonattainment or maintenance area.

R307-340-[1]3. [Applicability and] Definitions.

~~[(1) R307-325 establishes applicability and general requirements for R307-340.~~

—(2)—The following additional definitions apply to R307-340:

"Air Dried Coating" means coatings ~~[which]~~ that are dried by the use of air or a forced warm air at temperatures up to 90 degrees C (194 degrees F).

"Application Area" means the area where the coating is applied by spraying, dipping, or flow coating techniques.

"Basecoat" means a primary flat wood coating or coloring of panels and normally should completely hide substrate characteristics.

"Capture System" means the equipment (including hoods, ducts, fans, etc.) used to contain, capture, or transport a pollutant to a control device.

"Class II Hard Board Paneling Finish" means finishes ~~[which]~~ that meet the specifications of voluntary product standards PS-9-73 as approved by the American National Standards Institute.

"Clear Coat" means a coating ~~[which]~~ that lacks color and opacity.

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface. This term often applies to paints such as lacquers or enamels, but is also used to refer to films applied to paper, plastics, or foil.

"Coating Application System" means all operations and equipment ~~[which]~~ that applies, conveys, and dries a surface coating, including, but not limited to, spray booths, flow coaters, flash off areas, air dryers and ovens.

"Curtain Coating" means the application of a coating material to a wood substrate by means of a free-falling film of coating.

"Exterior Single Coat" means the same as topcoat but is applied directly to the metal substrate omitting the primer application.

"Extreme Performance Coatings" means coatings designed for harsh exposure or extreme environmental conditions.

"Fabric Coating" means the coating or saturation of a textile substrate with a knife, roll or rotogravure coater to impart characteristics that are not initially present, such as strength, stability, water or acid repellency, or appearance.

"Filler" means a type of coating used to fill pores, voids, and cracks in wood to provide a smooth surface. It can also be used to accentuate the grain of natural hardwood veneers.

"Flat Wood Coating" means the surface coating of any flat wood products.

"Flexographic Printing" means the application of works, designs, and pictures to substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

"Groove Coat" means a flat wood coating ~~[which]~~ that covers grooves cut into the panel to assure that the grooves are compatible with the final surface color.

"Hardwood Plywood" means plywood whose surface layer is a veneer of hardwood.

"Ink" means a flat wood coating used to put a decorative design on printed panels. It can also produce special appearances on natural hardwood plywood.

"Interior Single Coat" means a single film of coating applied to internal parts of large appliances that are not normally visible to the user.

"Knife Coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a blade that spreads the coating evenly over the width of the substrate.

"Large Appliances" means doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other similar products.

"Low Organic Solvent Coating" means coatings ~~[which]~~ that contain less organic solvents than the conventional coatings used by industry. Low organic solvent coatings include water-borne, higher-solids, electrodeposition, and powder coatings.

"Magnet Wire Coating" means the process of applying coating of electrical insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

"Metal Furniture Coating" means the surface coating of any furniture made of metal or any metal part ~~[which]~~ that will be assembled with other metal, wood fabric, plastic, or glass parts to form a furniture piece.

"Natural Finish Hardwood Plywood Panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

"Packaging Rotogravure Printing" means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into packaging products and labels.

"Paper Coating" means uniform distribution of coatings put on paper and pressure sensitive tapes regardless of substrate. Related web coating processes on plastic film and decorative coatings on metal foil are included in this definition. Paper coating covers saturation operations as well as coating operations. (Saturation means dipping the web into a bath).

"Particle Board" means a manufactured board made of individual particles ~~which~~ that have been coated with a binder and formed into flat sheets by pressure.

"Pressure Head Coating" means the application of a coating material to a wood substrate by means of a pressure head coater where coating material is metered into a pressure head and forced through a calibrated slit between two knives.

"Prime Coat" means the first film of coating applied in a two-coat operation.

"Primer" means a flat wood coating used to protect the wood from moisture and to provide a good surface for further coating applications.

"Printed Interior Panels" means panels whose grain or natural surface is obscured by fillers or basecoats upon which a simulated grain or decorative pattern is printed.

"Publication of Rotogravure Printing" means rotogravure printing upon paper ~~which~~ that is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

"Roll Coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls.

"Roll Printing" means the application of words, designs and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

"Rotogravure Coating" means the application of a uniform layer of material across the entire width of the web to substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

"Rotogravure Printing" means the application of words, designs, and pictures to a substrate by means of a roll printing technique ~~which~~ that involves a recessed image area in the form of cells.

"Sealer" means a type of coating used to seal off substances in the wood ~~which~~ that may affect subsequent finishes as well as protect the wood from moisture.

"Single Coat" means a single film of coating applied directly to the metal substrate omitting the primer application.

"Specialty Printing Operations" means all gravure and flexographic operations ~~which~~ that print a design or image, excluding publication gravure and packaging gravure printing. Specialty printing operations include, among other things, printing on paper cups and plates, patterned gift wrap, wallpaper, and floor coverings.

"Stain" means a nonprotective flat wood coating ~~which~~ that colors the wood surface without obscuring the grain.

"Tile Board" means paneling that has a colored waterproof surface coating.

"Vinyl Coating" means applying a decorative or protective top coat, or printing on vinyl coated fabric or vinyl sheets.

R307-340-[2]4. General Provisions for Volatile Organic Compounds.

~~[(1) R307-340 applies to Volatile Organic Compounds used for surface coating of paper, fabric, vinyl, metal furniture, large appliances, magnet wire, flat wood paneling, miscellaneous metal parts and products, and graphic arts.~~

—(2)(1) Fugitive emissions. Control techniques and work practices are to be implemented at all times to reduce VOC emissions from fugitive type sources. Control techniques and work practices include:

- (a) tight fitting covers for open tanks;
- (b) covered containers for solvent wiping cloths;
- (c) collection hoods for areas where solvent is used for cleanup;

and

- (d) proper disposal of dirty cleanup solvent.
- [(3)](2) Record keeping and reporting.

(a) The owner or operator of any source subject to R307-340 shall maintain:

(i) Records detailing all malfunctions affecting control equipment;

(ii) Records of all testing conducted under R307-340-[13]15;

(iii) Records of all monitoring conducted under R307-340-[13]15;

and

(iv) Records of the daily use of all paints, stains, lacquers, solvents, and other materials ~~which~~ that may be a source of VOC emissions.

(v) The recording format shall, at a minimum, follow the guidance in EPA-340/1-88-003, "Recordkeeping Guidance Document for Surface Coating Operations and the Graphic Arts Industry", or the most recent EPA guidance, and shall contain all information necessary to determine compliance with emissions limits on a daily basis.

(b) The owner or operator shall:

(i) Install, operate, and maintain process or control equipment, or both; monitoring instruments or procedures; as necessary to comply with (2)(a) above; and

(ii) Maintain, in writing, data or reports; or both, relating to monitoring instruments or procedures to document, upon review, the compliance status of the VOC emission source or control equipment.

(c) Copies of all records and reports required by (2)(a) and (b) above shall be retained by the owner or operator for a minimum of two years after the date on which the record was made, and shall be made available to the executive secretary or representative upon verbal or written request.

(d) If add-on control equipment is used, in addition to the requirements of R307-340-[13]15(5), the following information, as determined applicable for each source by the executive secretary, shall be monitored and recorded daily in order to assure continuous compliance. The substitution of continuous recordings of system operation for daily recordings may be allowed by the executive secretary. The required information pertains to the following systems:

(i) capture systems: fan power use, duct flow, and duct pressure.

(ii) carbon absorbers systems: bed temperature, bed vacuum pressure, pressure at the vacuum pump, accumulated time of operation, concentration of VOC in the outlet gas, and solvent recovery.

(iii) refrigeration systems: compressor discharge and suction pressures, condenser fluid temperature, and solvent recovery.

(iv) incinerator systems: exhaust gas temperature, temperature rise across a catalytic incinerator bed, flame temperature, and accumulated time of incineration.

[(4)](3) Malfunctions, Breakdowns, and Upsets. The owner or operator of a surface coating installation shall maintain a record of malfunctions, breakdowns, and upsets that result in excess VOC emissions. The record shall be kept for a calendar year and shall be submitted to the executive secretary by April 1 of the following year.

[(5)](4) Disposal of waste solvents. Waste solvents or waste materials [which]that contain solvents shall be disposed of by recycling, reclaiming or by incineration in an incinerator approved to process hazardous materials or by an alternate means approved by the executive secretary.

[(6)](5) Compliance Calculation Procedures.

(a) Compliance with R307-340 shall be determined on a daily basis. Sources may request approval for longer times for compliance determination from the executive secretary.

(b) Compliance calculation procedures shall follow the guidance of "Procedures for Certifying Quantity of Volatile [e]Organic Compounds Emitted by Paint, Ink, and other Coatings," EPA-450/3-84-019, or the most recent EPA guidance. Sources [which]that use add-on controls, or an approved alternative strategy instead of low solvent technology to meet the applicable emission limit, shall meet the equivalent VOC emission limit on the basis of solids applied (lbs. VOC/gallon solids applied, or lbs. VOC/lb. solids applied, for graphic arts sources).

R307-340-[3]5. Paper Coating.

(1) R307-340-[3]5 applies to roll, knife rotogravure coaters and drying ovens of paper coating operations.

(2) No owner or operator of a paper coating operation subject to R307-340-[3]5 may cause, allow or permit the discharge into the atmosphere of any VOC in excess of 0.35 kilograms per liter of coating (2.9 pounds per gallon), excluding water and solvents exempt from the definition of volatile organic compounds, delivered to the coating application from a paper coating operation.

(3) Equivalency calculations for coatings shall be performed in units of lbs. VOC/gallon of solid rather than lbs. VOC/gallon of coating when determining compliance. The equivalent emission limit is 4.8 lbs. VOC/gallon of solid.

(4) The emission limit specified above shall be achieved by:

(a) The application of a low solvent technology coating; or

(b) Incineration, provided that a minimum of 90 percent of non-methane volatile organic compounds (VOC measured as total combustible carbon) [which]that enter the incinerator are oxidized to carbon dioxide and water; or

(c) Through carbon adsorption provided that there is a minimum of 90% reduction efficiency of captured VOC emissions.

(5) The design, operation, and efficiency of any capture system used in conjunction with (4) above shall be certified in writing by the owner or operator and approved by the executive secretary.

R307-340-[4]6. Fabric and Vinyl Coating.

(1) R307-340-[4]6 applies to roll, knife or rotogravure coaters and drying ovens of fabric and vinyl coating operations.

(2) No owner or operator of a fabric or vinyl coating line subject to this section may cause, allow or permit the discharge into the atmosphere of any volatile organic compounds in excess of:

(a) 0.35 kilograms per liter of coating (2.9 pounds per gallon), excluding water and solvents exempt from the definition of volatile

organic compound, delivered to the coating applicator from a fabric coating line; or

(b) 0.45 kilograms per liter of coating (3.8 pounds per gallon), excluding water and solvents exempt from the definition of volatile organic compound, delivered to the coating applicator from a vinyl coating line.

(3) Equivalency calculations for coatings shall be performed in units of lbs. VOC/gallon of solids rather than lbs. VOC/gallon of coating when determining compliance. The equivalent emission limits shall be 4.8 lbs VOC/gallon solids for fabric coating, and 7.9 lbs VOC/gallon for vinyl coating.

(4) Organosol and plastisol coatings shall not be used to bubble emissions from vinyl printing and topcoating.

(5) The emission limitations specified above shall be achieved by:

(a) The application of a low solvent content coating technology; or

(b) Incineration, provided that a minimum of 90 percent of the non-methane volatile organic compounds (VOC measured as total combustible carbon) [which]that enter the incinerator are oxidized to carbon dioxide and water; or

(c) Through carbon adsorption provided that there is a minimum of 90 percent reduction efficiency of captured VOC emissions.

(6) The design, operation, and efficiency of any capture system used in conjunction with (5) above shall be certified in writing by the owner or operator and approved by the executive secretary.

R307-340-[5]7. Metal Furniture Coating VOC Emissions.

(1) R307-340-[5]7 applies to the application areas, flash-off areas, and ovens of metal furniture coating lines involved in prime and topcoat or single coat operations.

(2) No owner or operator of a metal furniture coating line subject to this section may cause, allow or permit the discharge into the atmosphere of any volatile organic compound in excess of 0.3 kilograms per liter of coating (3.0 pounds per gallon) excluding water and solvents exempt from the definition of volatile organic compounds, delivered to the coating applicator from prime and topcoat or single coat operations.

(3) Equivalency calculations for coatings shall be performed in units of lbs. VOC/gallon of solid rather than lbs. VOC/gallon of coating when determining compliance. The equivalent emission limit is 5.1 lbs. VOC/gallon solids.

(4) The emission limitation specified above shall be achieved by:

(a) The application of low solvent technology; or

(b) Incineration, provided that a minimum of 90 percent of the non-methane volatile organic compounds (VOC measured as total combustible carbon) [which]that enter the incinerator are oxidized to carbon dioxide and water; or

(c) using water-borne electrodeposition; or

(d) using water-borne spray, dip or flowcoat; or

(e) using powder; or

(f) using higher solids spray; or

(g) carbon adsorption.

[(4)](5) The design, operation, and efficiency of any capture system used in conjunction with (4) above shall be certified in writing by the owner or operator and approved by the executive secretary.

R307-340-[6]8. Large Appliance Surface Coating VOC Emissions.

(1) R307-340-[6]8 applies to application areas flash-off areas and ovens of large appliance coating lines involved in prime, single or top coating operations.

(2) No owner or operator of a large appliance coating line subject to this section may cause, allow or permit the discharge to the atmosphere of any volatile organic compounds in excess of 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water and solvents exempt from the definition of volatile organic compound, delivered to the coating applicator from prime, single, or top-coat coating operations.

(3) Equivalency calculations for coatings shall be performed in units of lbs. VOC/gallon of solid rather than lbs. VOC/gallon of coating when determining compliance. The equivalent emission limit is 4.5 lbs. VOC/gallon solids.

(4) The emission limitations specified above shall be achieved by:

(a) The application of low solvent content technology; or

(b) Incineration provided 90 percent of the non-methane volatile organic compounds (VOC measured as total combustible carbon) [which] that enter the incinerator are oxidized to carbon dioxide and water; or

(c) using water-borne electrodeposition; or

(d) using water-borne spray, dip or flowcoat; or

(e) using powder; or

(f) using higher solids spray; or

(g) carbon adsorption.

(5) The design, operation, and efficiency or any capture system used in conjunction with (4) above shall be certified in writing by the owner or operator.

R307-340-[7]9. Magnet Wire Coating VOC Emissions.

(1) R307-340-[7]9 applies to ovens of magnet wire coating operations.

(2) No owner or operator of a magnet wire coating oven subject to this section may cause, allow or permit discharge into the atmosphere of any volatile organic compounds in excess of 0.20 kilograms per liter of coating (1.7 pounds per gallon), excluding water and solvents exempt from the definition of volatile organic compound, delivered to the coating applicator from magnet wire coating operations.

(3) Equivalency calculations for coatings shall be performed in units of lbs. VOC/gallon of solid rather than lbs. VOC/gallon of coating when determining compliance. The equivalent emission limit is 2.2 lbs. VOC/gallon solids.

(4) The emission limitations specified above shall be achieved by:

(a) The application of low solvent content coating technology; or

(b) Incineration, provided that a minimum of 90 percent of the non-methane volatile organic compounds (VOC measured as total combustible carbon) [which] that enter the incinerator are oxidized to carbon dioxide and water; or

(5) The design, operation, and efficiency of any capture system used in conjunction with (4)(b) above shall be certified in writing by the owner or operator and approved by the executive secretary.

R307-340-[8]10. Flat Wood Coating.

(1) R307-340-[8]10 applies to the application areas of flat wood coating operations involved in but not limited to, filler, sealer, groove coat, primer, stain, basecoat, inks, and topcoat operations.

(2) No owner or operator of an interior printed hardwood, plywood, and particle board coating operation may cause, allow or permit discharge to the atmosphere of any organic volatile compound in excess of a weighted average VOC content of 0.20 kilograms per liter of coating (1.7 pounds per gallon), excluding water and solvents exempt from the definition of volatile organic compound, delivered to a

coating applicator from, but not limited to, filler, sealer, groove coat, primer, stain, basecoat, ink and topcoat operation.

(3) No owner or operator of a natural finish hardwood plywood coating operation may cause, allow or permit discharge to the atmosphere any organic volatile compound in excess of a weighted average VOC content of 0.40 kilograms per liter of coating (3.3 pounds per gallon) excluding water and solvents exempt from the definition of volatile organic compound, delivered to a coating applicator from, but not limited to, filler, sealer, groove coat, primer, stain basecoat, ink and topcoat operations.

(4) No owner or operator of a Class II hardwood panel finish operation may cause, allow, or permit discharge to the atmosphere of any organic volatile compound in excess of a weighted average VOC content of 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water and solvents exempt from the definition of volatile organic compound, delivered to a coating applicator from, but not limited to, filler, sealer, groove coat, primer, stain, basecoat, ink, and topcoat operations.

(5) The emission limitations specified above shall be achieved by:

(a) The application of low solvent technology; or

(b) The application of water-borne coating technology; or

(c) The application of ultraviolet-curable coating technology; or

(6) This regulation does not apply to the manufacture of exterior siding, tile board, or particle board used as a furniture component.

(7) Equivalency calculations for coatings shall be performed in units of lbs. VOC/gallons of solid rather than lbs. VOC/gallons of coating when determining compliance. The equivalent emission limit for interior printed hardwood, plywood, and particle board coating is 2.2 lbs. VOC/gallon solids. The equivalent emission limit for natural finish hardwood plywood coating shall be 6.0 lbs. VOC/gallon solids. The equivalent emission limit for Class II hardwood panel finish operations is 4.5 lbs. VOC/gallon solids.

R307-340-[9]11. Miscellaneous Metal Parts and Products VOC Emissions.

(1) R307-340-[9]11 applies to the application areas, flash-off areas air and forced air dryers, and ovens used in the surface coating of miscellaneous metal parts and products:

(2) Applicable Industries:

(a) Large farm machinery (harvesting, fertilizing, planting, tractors, combines, etc.)

(b) Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.)

(c) Small appliance (fans, mixers, blenders, crock pots, vacuum cleaners, etc.)

(d) Commercial machinery (computers, typewriters, calculators, vending machines, etc.)

(e) Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.)

(f) Fabricated metal products (metal covered doors, frames, trailer frames, etc.)

(g) Any other industrial category [which] that coats metal parts or products under the standard Industrial Classification Code of major group 33 (primary metal industries), major group 34 (fabricated metal products), major group 35 (nonelectric machinery), major group 36 (electrical machinery), major group 37 (transportation equipment) major group 38 (miscellaneous instruments), and major group 39 (miscellaneous manufacturing industries).

(h) This regulation does not apply to:

(i) the surface coating of automobiles and light-duty trucks,

- (ii) flat metal sheets and strips in the form of rolls or coils,
 - (iii) exterior of airplanes,
 - (iv) automobile refinishing,
 - (v) exterior of marine vessels,
 - (vi) customized top coating of automobiles and trucks if production is less than 35 vehicles per day,
 - (vii) a source whose potential VOC emissions are less than 10 tons/year. Potential emissions are based upon design capacity (or maximum production), and 8760 hours/year, before add-on controls. The potential emission level is determined on a plant-wide basis, summing all individual emission sources within the miscellaneous metal parts and products category.
- (3) No owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may cause, allow or permit discharge to the atmosphere of any volatile organic compounds in excess of:
- (a) 0.52 kilograms per liter (4.3 pounds per gallon) of coating, excluding water and solvents exempt from the definition of volatile organic compound, delivered to a coating applicator that applies clear coating;
 - (b) 0.42 kilograms per liter (3.5 pounds per gallon) of coating, excluding water and solvents exempt from the definition of volatile organic compound, delivered to a coating applicator in a coating application system that utilizes air or forced warm air at temperatures up to 90 degrees C (194 degrees F);
 - (c) 0.42 kilograms per liter (3.5 pounds per gallon) of coating, excluding water and solvents exempt from the definition of volatile organic compound, delivered to a coating applicator that applies extreme performance coatings;
 - (d) 0.36 kilograms per liter (3.0 pounds per gallon) of coating, excluding water and solvents exempt from the definition of volatile organic compound, delivered to a coating applicator for all other coating and coating application systems.
- (4) Equivalency calculations for coatings shall be performed in units of lbs. VOC/gallon of solid rather than lbs. VOC/gallon of coating when determining compliance. The equivalent emission limit for air dried items is 6.7 lbs. VOC/gallon solids. The equivalent emission limit for clear-coated items is 10.3 lbs. VOC/gallon solids. The equivalent emission limit for extreme performance coatings is 6.7 lbs. VOC/gallon solids. The equivalent emission limit for other coatings and systems is 5.1 lbs. VOC/gallon solids.
- (5) If more than one emission limitation indicated in this section applies to a specific coating, then the least stringent emission limitation shall apply. All volatile organic compound emissions from solvent washing involved in a coating process shall be considered in the emission limitations set forth in R307-340-[9]11(3), unless the solvent is directed into containers that prevent evaporation into the atmosphere.
- (6) The emission limitations set forth in (3) above shall be achieved by:
- (a) The application of low solvent technology; or
 - (b) An incineration system ~~which~~ that oxidizes a minimum of 90 percent of the non-methane volatile organic compounds (VOC measures as total combustible carbon) to carbon dioxide and water.
- (7) The design, operation, and efficiency of any capture system used in conjunction with (6)(b) above shall be certified in writing by the owner or operator and approved by the executive secretary.

R307-340-[40]12. Graphic Arts.

- (1) R307-340-[40]12 applies to: packaging and publication rotogravure; packaging and publication flexographic; and specialty printing operations employing solvents containing ink and having

plant-wide potential emissions of volatile organic compounds (VOC) equal to or greater than 90 megagrams/yr (100 tons/yr). Potential emissions shall be calculated based on uncontrolled emissions operating at design capacity or at maximum production for 8760 hours/year. (Solvent shall include that used for dilution of ink and for equipment cleaning.) Machines ~~which~~ that have both coating units (application of a uniform layer of material across the entire width of a web) and printing units (formation of words, designs and pictures) shall be considered as performing a printing operation. This rule does not apply to offset lithography or letter press printing ~~which~~ that do not use volatile organic compounds.

(2) No owner or operator of a packaging and publication rotogravure; packaging and publication flexographic, and specialty printing operations employing solvent containing ink may operate, cause, or allow or permit the operation of a facility unless:

(a) The volatile fraction of ink, as it is applied to the substrate, contains 25.0 percent by volume or less of organic solvent and 75.0 percent by volume or more of water; or

(b) The ink as it is applied to the substrate, less water, contains 60.0 percent by volume or more nonvolatile material; or

(c) The owner or operator installs and operates;

(i) A carbon adsorption system ~~which~~ that reduces the volatile organic emissions from the capture system by a minimum of 90.0 percent by weight; or

(ii) An incineration system ~~which~~ that oxidizes a minimum of 90.0 percent of the non-methane volatile organic compounds (VOC measured as total combustible carbon) to carbon dioxide and water.

(3) A capture system must be used in conjunction with the emission control systems indicated in this section. The design and operation of a capture system must be consistent with good engineering practices and shall be required to provide for an overall reduction in volatile organic compound emissions of at least:

(a) 75.0 percent where a publication rotogravure process is employed;

(b) 65.0 percent where a packaging rotogravure process is employed; or

(c) 60.0 percent where a flexographic printing process is employed.

R307-340-[41]13. Exemptions.

The requirements of R307-340-[4]3 through [8]10 shall not apply to the following:

(1) sources whose emissions of volatile organic compounds are not more than 6.8 kilograms (15 pounds) in any 24 hour period, nor more than 1.4 kilograms (3 pounds) in any one (1) hour provided the emission rates are certified. These cutoffs apply to the emissions level on a plant-wide basis, and are determined by summing emissions from all coating operations within the same regulated category[-];

(2) sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance provided;

(a) the operation of the source is not an integral part of the production process; and

(b) the emissions from the source do not exceed 363 kilograms (800 pounds) in any one calendar month. These cutoffs apply to the emissions level on a plant-wide basis, and are determined by summing emissions from all coating operations within the same regulated category.

R307-340-[42]14. Capture Systems.

The design, operation and efficiency of any capture system used in conjunction with any emission control system shall be certified in

writing by the source owner or operator and approved by the executive secretary. Unless the capture system meets the requirements for a total enclosure, specified in section 60.713(b)(5)(i) of 40 CFR Part 60 Subpart SSS, or unless material balance techniques approved by the executive secretary are used to adequately determine overall VOC capture and destruction or recovery efficiency, the efficiency of the capture system will be determined by test methods approved by the executive secretary. Testing for capture efficiency shall be performed on a case-by-case basis as required by the executive secretary, and shall be consistent with EPA guidance. The requirements of R307-340-[2]4(3)(d) apply to the capture and control device system. When capture and control device efficiency must be independently determined, the overall VOC emission percent reduction equals (percent capture efficiency x percent control device efficiency)/100.

R307-340-[13]15. Testing and Monitoring.

- (1) Upon request by the executive secretary, the owner or operator of a volatile organic compound source required to comply with R307-340 shall demonstrate compliance by the method of this section or an alternative method approved by the executive secretary.
- (2) Test procedures to determine compliance with R307-340 must be approved by the executive secretary and must utilize one of the following methods or an alternative method approved by the executive secretary or equivalent method.
 - (a) For surface coatings: EPA Reference Method 24 of 40 CFR Part 60
 - (b) For add-on control equipment: EPA Reference Methods 1 through 4, 18 and 25, of the 40 CFR Part 60;
 - (c) EPA 340/1-86-016 "A Guide for Surface Coating Calculations;" and
 - (d) EPA 450/3-84-019 "Procedures for Certifying Quantity of Volatile organic Compounds Emitted by Paint, Ink and Other Coatings."
- (3) All tests shall be made by, or under the direction of, a person qualified by training or experience, or both, in the field of air pollution testing. The executive secretary will evaluate test data submitted.
- (4) A person proposing to conduct a volatile organic compound emissions test shall notify the executive secretary of the intent to test not less than 30 days before the proposed initiation of the test. The notification shall contain the information required by, and be in a format approved by, the executive secretary.
- (5) If add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:
 - (a) Exhaust gas temperatures of all incinerators;
 - (b) Temperature rise across a catalytic incinerator bed;
 - (c) Breakthrough of VOC on a carbon adsorption unit; and
 - (d) Any other continuous monitoring or recording device required by the executive secretary.
- (6) The executive secretary may accept, instead of the testing required in R307-340-[13]15, a certification by the manufacturer of the composition of the coatings if supported by actual batch formulation records. The owner or operator of a VOC source required to comply with R307-340 must obtain certification from the coating manufacturers that the test methods used for determination of the VOC content meet the requirements specified in (2) above. The owner or operator shall make this certification readily available to the Division of Air Quality to allow the results to be used in the daily compliance calculations specified in R307-340-[2(6)]4(5).
- (7) The performance of add-on control equipment shall be demonstrated with the required test methods of (2) above at equipment

start up and after any major modification to the control equipment. Baseline operating parameters shall be established during the satisfactory (i.e. in-compliance) operation of the control equipment, including operation during all anticipated ranges of process throughput. During subsequent process operation, the owner or operator shall maintain the operating conditions of the add-on controls as close to these baseline conditions as possible. If serious operational problems with an add-on control system are indicated by the daily monitoring required by R307-340-[2(3)]4(2)(d), (such problems may be indicated by changes from baseline conditions), repeat performance tests shall be performed by the owner or operator, and may be required by the executive secretary, as necessary.

(8) To determine compliance with the applicable standards in R307-340, samples shall be taken from the coating as freshly delivered to the reservoir of the coating applicator. All VOC emissions from solvent washing involved in a coating process shall be considered in determining compliance with an emission limit, unless the source owner or operator documents that the VOCs from solvent washing are collected and disposed of in a manner that prevents their evaporation into the atmosphere.

R307-340-16. Alternate Methods of Control.

(1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-340, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.

(2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all tests, monitoring, and inspections required by R307-340 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, VOCs and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

R307-340-17. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, emission controls, surface coating[*], ozone
Date of Enactment or Last Substantive Amendment: [September 15, 1998]2006

Notice of Continuation: August 5, 2003
 Authorizing, and Implemented or Interpreted Law: ~~19-2-104~~
 19-2-104(1)(a)

Environmental Quality, Air Quality
R307-341
Davis and Salt Lake Counties and
Ozone Nonattainment Areas: Cutback
Asphalt

NOTICE OF PROPOSED RULE

(Amendment)

DAR File No.: 29010

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-341 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-341. In addition, the definition for the term "asphalt" has been moved from Section R307-101-2 to Rule R307-341. This definition comes from the Control Technique Guidance (CTG) titled, Control of Volatile Organic Compounds from use of Cutback Asphalt, EPA-450/2-077-037, December 1977, and was added to the general definitions when this Reasonably Available Control Technology (RACT) rule was adopted in the early 1980s. The term "asphalt" is used in several other rules; however, in those rules the common usage of the term "asphalt" is more appropriate than the specific language in this definition. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

- ❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ OTHER PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
 150 N 1950 W
 SALT LAKE CITY UT 84116-3085, or
 at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.
R307-341. ~~[Davis and Salt Lake Counties and]~~ Ozone
Nonattainment and Maintenance Areas: Cutback Asphalt.
R307-341-1. Purpose.

This rule establishes reasonably achievable control technology (RACT) requirements for the use or application of cutback asphalt in ozone nonattainment and maintenance areas.

R307-341-2. Applicability.

R307-341 applies to any person who uses or applies asphalt in any ozone nonattainment or maintenance area.

Change to Proposed Rule R307-340

1 used to accentuate the grain of natural hardwood veneers.

2 "Flat Wood Coating" means the surface coating of any flat
3 wood products.

4 "Flexographic Printing" means the application of works,
5 designs, and pictures to substrate by means of a roll printing
6 technique in which the pattern to be applied is raised above the
7 printing roll and the image carrier is made of rubber or other
8 elastomeric materials.

9 "Groove Coat" means a flat wood coating that covers grooves
10 cut into the panel to assure that the grooves are compatible with
11 the final surface color.

12 "Hardwood Plywood" means plywood whose surface layer is a
13 veneer of hardwood.

14 "Ink" means a flat wood coating used to put a decorative
15 design on printed panels. It can also produce special appearances
16 on natural hardwood plywood.

17 "Interior Single Coat" means a single film of coating applied
18 to internal parts of large appliances that are not normally
19 visible to the user.

20 "Knife Coating" means the application of a coating material
21 to a substrate by means of drawing the substrate beneath a blade
22 that spreads the coating evenly over the width of the substrate.

23 "Large Appliances" means doors, cases, lids, panels, and
24 interior support parts of residential and commercial washers,
25 dryers, ranges, refrigerators, freezers, water heaters,
26 dishwashers, trash compactors, air conditioners, and other similar
27 products.

28 "Low Organic Solvent Coating" means coatings that contain
29 less organic solvents than the conventional coatings used by
30 industry. Low organic solvent coatings include water-borne,
31 higher-solids, electrodeposition, and powder coatings.

32 "Magnet Wire Coating" means the process of applying coating
33 of electrical insulating varnish or enamel to aluminum or copper
34 wire for use in electrical machinery.

35 "Metal Furniture Coating" means the surface coating of any
36 furniture made of metal or any metal part that will be assembled
37 with other metal, wood fabric, plastic, or glass parts to form a
38 furniture piece.

39 "Natural Finish Hardwood Plywood Panels" means panels whose
40 original grain pattern is enhanced by essentially transparent
41 finishes frequently supplemented by fillers and toners.

42 "Packaging Rotogravure Printing" means rotogravure printing
43 upon paper, paper board, metal foil, plastic film, and other
44 substrates, which are, in subsequent operations, formed into
45 packaging products and labels.

46 "Paper Coating" means uniform distribution of coatings put on
47 paper and pressure sensitive tapes regardless of substrate.
48 Related web coating processes on plastic film and decorative
49 coatings on metal foil are included in this definition. Paper
50 coating covers saturation operations as well as coating
51 operations. (Saturation means dipping the web into a bath).

52 "Particle Board" means a manufactured board made of
53 individual particles that have been coated with a binder and

1 formed into flat sheets by pressure.

2 "Pressure Head Coating" means the application of a coating
3 material to a wood substrate by means of a pressure head coater
4 where coating material is metered into a pressure head and forced
5 through a calibrated slit between two knives.

6 "Prime Coat" means the first film of coating applied in a
7 two-coat operation.

8 "Primer" means a flat wood coating used to protect the wood
9 from moisture and to provide a good surface for further coating
10 applications.

11 "Printed Interior Panels" means panels whose grain or natural
12 surface is obscured by fillers or basecoats upon which a simulated
13 grain or decorative pattern is printed.

14 "Publication of Rotogravure Printing" means rotogravure
15 printing upon paper that is subsequently formed into books,
16 magazines, catalogues, brochures, directories, newspaper
17 supplements, and other types of printed materials.

18 "Roll Coating" means the application of a coating material to
19 a substrate by means of hard rubber or steel rolls.

20 "Roll Printing" means the application of words, designs and
21 pictures to a substrate usually by means of a series of hard
22 rubber or steel rolls each with only partial coverage.

23 "Rotogravure Coating" means the application of a uniform
24 layer of material across the entire width of the web to substrate
25 by means of a roll coating technique in which the pattern to be
26 applied is etched on the coating roll. The coating material is
27 picked up in these recessed areas and is transferred to the
28 substrate.

29 "Rotogravure Printing" means the application of words,
30 designs, and pictures to a substrate by means of a roll printing
31 technique that involves a recessed image area in the form of
32 cells.

33 "Sealer" means a type of coating used to seal off substances
34 in the wood that may affect subsequent finishes as well as protect
35 the wood from moisture.

36 "Single Coat" means a single film of coating applied directly
37 to the metal substrate omitting the primer application.

38 "Specialty Printing Operations" means all gravure and
39 flexographic operations that print a design or image, excluding
40 publication gravure and packaging gravure printing. Specialty
41 printing operations include, among other things, printing on paper
42 cups and plates, patterned gift wrap, wallpaper, and floor
43 coverings.

44 "Stain" means a nonprotective flat wood coating that colors
45 the wood surface without obscuring the grain.

46 "Tile Board" means paneling that has a colored waterproof
47 surface coating.

48 "Vinyl Coating" means applying a decorative or protective top
49 coat, or printing on vinyl coated fabric or vinyl sheets.

50
51 **R307-340-4. General Provisions for Volatile Organic Compounds.**

52 (1) Fugitive emissions. Control techniques and work
53 practices are to be implemented at all times to reduce volatile

1 organic compound (VOC) emissions from fugitive type sources.
2 Control techniques and work practices include:

- 3 (a) tight fitting covers for open tanks;
4 (b) covered containers for solvent wiping cloths;
5 (c) collection hoods for areas where solvent is used for
6 cleanup; and
7 (d) proper disposal of dirty cleanup solvent.

8 (2) Record keeping and reporting.

9 (a) The owner or operator of any source subject to R307-340
10 shall maintain:

11 (i) Records detailing all malfunctions affecting control
12 equipment;

13 (ii) Records of all testing conducted under R307-340-15;

14 (iii) Records of all monitoring conducted under R307-340-15;
15 and

16 (iv) Records of the daily use of all paints, stains,
17 lacquers, solvents, and other materials that may be a source of
18 VOC emissions.

19 (v) The recording format shall, at a minimum, follow the
20 guidance in EPA-340/1-88-003, "Recordkeeping Guidance Document for
21 Surface Coating Operations and the Graphic Arts Industry", or the
22 most recent EPA guidance, and shall contain all information
23 necessary to determine compliance with emissions limits on a daily
24 basis.

25 (b) The owner or operator shall:

26 (i) Install; operate; and maintain process or control
27 equipment, or both; monitoring instruments or procedures; as
28 necessary to comply with (2)(a) above; and

29 (ii) Maintain, in writing, data or reports, or both,
30 relating to monitoring instruments or procedures to document, upon
31 review, the compliance status of the VOC emission source or
32 control equipment.

33 (c) Copies of all records and reports required by (2)(a) and
34 (b) above shall be retained by the owner or operator for a minimum
35 of two years after the date on which the record was made, and
36 shall be made available to the executive secretary or
37 representative upon verbal or written request.

38 (d) If add-on control equipment is used, in addition to the
39 requirements of R307-340-15(5), the following information, as
40 determined applicable for each source by the executive secretary,
41 shall be monitored and recorded daily in order to assure
42 continuous compliance. The substitution of continuous recordings
43 of system operation for daily recordings may be allowed by the
44 executive secretary. The required information pertains to the
45 following systems:

46 (i) capture systems: fan power use, duct flow, and duct
47 pressure.

48 (ii) carbon absorbers systems: bed temperature, bed vacuum
49 pressure, pressure at the vacuum pump, accumulated time of
50 operation, concentration of VOCs in the outlet gas, and solvent
51 recovery.

52 (iii) refrigeration systems: compressor discharge and
53 suction pressures, condenser fluid temperature, and solvent

1 recovery.

2 (iv) incinerator systems: exhaust gas temperature,
3 temperature rise across a catalytic incinerator bed, flame
4 temperature, and accumulated time of incineration.

5 (3) Malfunctions, Breakdowns, and Upsets. The owner or
6 operator of a surface coating installation shall maintain a record
7 of malfunctions, breakdowns, and upsets that result in excess VOC
8 emissions. The record shall be kept for a calendar year and shall
9 be submitted to the executive secretary by April 1 of the
10 following year.

11 (4) Disposal of waste solvents. Waste solvents or waste
12 materials that contain solvents shall be disposed of by recycling,
13 reclaiming or by incineration in an incinerator approved to
14 process hazardous materials or by an alternate means approved by
15 the executive secretary.

16 (5) Compliance Calculation Procedures.

17 (a) Compliance with R307-340 shall be determined on a daily
18 basis. Sources may request approval for longer times for
19 compliance determination from the executive secretary.

20 (b) Compliance calculation procedures shall follow the
21 guidance of "Procedures for Certifying Quantity of [~~Volatile~~
22 ~~Organic Compounds~~]VOCs Emitted by Paint, Ink, and other Coatings,"
23 EPA-450/3-84-019, or the most recent EPA guidance. Sources that
24 use add-on controls, or an approved alternative strategy instead
25 of low solvent technology to meet the applicable emission limit,
26 shall meet the equivalent VOCs emission limit on the basis of
27 solids applied (lbs. VOCs/gallon solids applied, or lbs. VOCs/lb.
28 solids applied, for graphic arts sources).

30 R307-340-5. Paper Coating.

31 (1) R307-340-5 applies to roll, knife rotogravure coaters
32 and drying ovens of paper coating operations.

33 (2) No owner or operator of a paper coating operation
34 subject to R307-340-5 may cause, allow or permit the discharge
35 into the atmosphere of any VOC in excess of 0.35 kilograms per
36 liter of coating (2.9 pounds per gallon), excluding water and
37 solvents exempt from the definition of [~~volatile organic~~
38 ~~compounds~~]VOC, delivered to the coating application from a paper
39 coating operation.

40 (3) Equivalency calculations for coatings should be
41 performed in units of lbs. VOCs/gallon of solid rather than lbs.
42 VOC/gallon of coating when determining compliance. The equivalent
43 emission limit is 4.8 lbs. VOC/gallon of solid.

44 (4) The emission limit specified above shall be achieved by:

45 (a) The application of a low solvent technology coating; or

46 (b) Incineration, provided that a minimum of 90 percent of
47 non-methane [~~volatile organic compounds~~]VOCs (VOCs measured as
48 total combustible carbon) that enter the incinerator are oxidized
49 to carbon dioxide and water; or

50 (c) Through carbon adsorption provided that there is a
51 minimum of 90% reduction efficiency of captured VOC emissions.

52 (5) The design, operation, and efficiency of any capture
53 system used in conjunction with (4) above shall be certified in

1 writing by the owner or operator and approved by the executive
2 secretary.

3
4 **R307-340-6. Fabric and Vinyl Coating.**

5 (1) R307-340-6 applies to roll, knife or rotogravure coaters
6 and drying ovens of fabric and vinyl coating operations.

7 (2) No owner or operator of a fabric or vinyl coating line
8 subject to this section may cause, allow or permit the discharge
9 into the atmosphere of any [~~volatile organic compounds~~]VOCs in
10 excess of:

11 (a) 0.35 kilograms per liter of coating (2.9 pounds per
12 gallon), excluding water and solvents exempt from the definition
13 of [~~volatile organic compound~~]VOC, delivered to the coating
14 applicator from a fabric coating line; or

15 (b) 0.45 kilograms per liter of coating (3.8 pounds per
16 gallon), excluding water and solvents exempt from the definition
17 of [~~volatile organic compound~~]VOC, delivered to the coating
18 applicator from a vinyl coating line.

19 (3) Equivalency calculations for coatings shall be performed
20 in units of lbs. VOCs/gallon[s] of solids rather than lbs.
21 VOCs/gallon of coating when determining compliance. The
22 equivalent emission limits shall be 4.8 lbs VOCs/gallon solids for
23 fabric coating, and 7.9 lbs VOCs/gallon for vinyl coating.

24 (4) Organosol and plastisol coatings shall not be used to
25 bubble emissions from vinyl printing and topcoating.

26 (5) The emission limitations specified above shall be
27 achieved by:

28 (a) The application of a low solvent content coating
29 technology; or

30 (b) Incineration, provided that a minimum of 90 percent of
31 the non-methane [~~volatile organic compounds~~]VOCs (VOCs measured as
32 total combustible carbon) that enter the incinerator are oxidized
33 to carbon dioxide and water; or

34 (c) Through carbon adsorption provided that there is a
35 minimum of 90 percent reduction efficiency of captured VOC
36 emissions.

37 (6) The design, operation, and efficiency of any capture
38 system used in conjunction with (5) above shall be certified in
39 writing by the owner or operator and approved by the executive
40 secretary.

41
42 **R307-340-7. Metal Furniture Coating VOC Emissions.**

43 (1) R307-340-7 applies to the application areas, flash-off
44 areas, and ovens of metal furniture coating lines involved in
45 prime and top-coat or single coat operations.

46 (2) No owner or operator of a metal furniture coating line
47 subject to this section may cause, allow or permit the discharge
48 into the atmosphere of any [~~volatile organic compound~~]VOC in
49 excess of 0.3 kilograms per liter of coating (3.0 pounds per
50 gallon) excluding water and solvents exempt from the definition of
51 [~~volatile organic compounds~~]VOC, delivered to the coating
52 applicator from prime and topcoat or single coat operations.

53 (3) Equivalency calculations for coatings shall be performed

in units of lbs. VOCs/gallon of solid rather than lbs. VOCs/gallon of coating when determining compliance. The equivalent emission limit is 5.1 lbs. VOCs/gallon solids.

(4) The emission limitation specified above shall be achieved by:

(a) The application of low solvent technology; or

(b) Incineration, provided that a minimum of 90 percent of the non-methane [~~volatile organic compounds~~]VOCs (VOCs measured as total combustible carbon) that enter the incinerator are oxidized to carbon dioxide and water; or

(c) using water-borne electrodeposition; or

(d) using water-borne spray, dip or flowcoat; or

(e) using powder; or

(f) using higher solids spray; or

(g) carbon adsorption.

(5) The design, operation, and efficiency of any capture system used in conjunction with (4) above shall be certified in writing by the owner or operator and approved by the executive secretary.

R307-340-8. Large Appliance Surface Coating VOC Emissions.

(1) R307-340-[6]8 applies to application areas flash-off areas and ovens of large appliance coating lines involved in prime, single or top coating operations.

(2) No owner or operator of a large appliance coating line subject to this section may cause, allow or permit the discharge to the atmosphere of any [~~volatile organic compounds~~]VOCs in excess of 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water and solvents exempt from the definition of [~~volatile organic compound~~]VOC, delivered to the coating applicator from prime, single, or top-coat coating operations.

(3) Equivalency calculations for coatings shall be performed in units of lbs. VOCs/gallon of solid rather than lbs. VOCs/gallon of coating when determining compliance. The equivalent emission limit is 4.5 lbs. VOCs/gallon solids.

(4) The emission limitations specified above shall be achieved by:

(a) The application of low solvent content technology; or

(b) Incineration provided 90 percent of the non-methane [~~volatile organic compounds~~]VOCs (VOCs measured as total combustible carbon) that enter the incinerator are oxidized to carbon dioxide and water; or

(c) using water-borne electrodeposition; or

(d) using water-borne spray, dip or flowcoat; or

(e) using powder; or

(f) using higher solids spray; or

(g) carbon adsorption.

(5) The design, operation, and efficiency or any capture system used in conjunction with (4) above shall be certified in writing by the owner or operator.

R307-340-9. Magnet Wire Coating VOC Emissions.

(1) R307-340-9 applies to ovens of magnet wire coating

1 operations.

2 (2) No owner or operator of a magnet wire coating oven
3 subject to this section may cause, allow or permit discharge into
4 the atmosphere of any [~~volatile organic compounds~~]VOCs in excess
5 of 0.20 kilograms per liter of coating (1.7 pounds per gallon),
6 excluding water and solvents exempt from the definition of
7 [~~volatile organic compound~~]VOC, delivered to the coating
8 applicator from magnet wire coating operations.

9 (3) Equivalency calculations for coatings shall be performed
10 in units of lbs. VOCs/gallon of solid rather than lbs. VOCs/gallon
11 of coating when determining compliance. The equivalent emission
12 limit is 2.2 lbs. VOCs/gallon solids.

13 (4) The emission limitations specified above shall be
14 achieved by:

15 (a) The application of low solvent content coating
16 technology; or

17 (b) Incineration, provided that a minimum of 90 percent of
18 the non-methane [~~volatile organic compounds~~]VOCs (VOCs measured as
19 total combustible carbon) that enter the incinerator are oxidized
20 to carbon dioxide and water; or

21 (5) The design, operation, and efficiency of any capture
22 system used in conjunction with (4)(b) above shall be certified in
23 writing by the owner or operator and approved by the executive
24 secretary.

25 26 **R307-340-10. Flat Wood Coating.**

27 (1) R307-340-10 applies to the application areas of flat
28 wood coating operations involved in but not limited to, filler,
29 sealer, groove coat, primer, stain, basecoat, inks, and topcoat
30 operations.

31 (2) No owner or operator of an interior printed hardwood,
32 plywood, and particle board coating operation may cause, allow or
33 permit discharge to the atmosphere of any [~~organic-volatile~~
34 ~~compound~~]VOCs in excess of a weighted average VOC content of 0.20
35 kilograms per liter of coating (1.7 pounds per gallon), excluding
36 water and solvents exempt from the definition of [~~volatile organic~~
37 ~~compound~~]VOC, delivered to a coating applicator from, but not
38 limited to, filler, sealer, groove coat, primer, stain, basecoat,
39 ink and topcoat operation.

40 (3) No owner or operator of a natural finish hardwood
41 plywood coating operation may cause, allow or permit discharge to
42 the atmosphere any [~~organic-volatile compound~~]VOCs in excess of a
43 weighted average VOC content of 0.40 kilograms per liter of
44 coating (3.3 pounds per gallon) excluding water and solvents
45 exempt from the definition of [~~volatile organic compound~~]VOC,
46 delivered to a coating applicator from, but not limited to,
47 filler, sealer, groove coat, primer, stain basecoat, ink and
48 topcoat operations.

49 (4) No owner or operator of a Class II hardwood panel finish
50 operation may cause, allow, or permit discharge to the atmosphere
51 of any [~~organic-volatile compound~~]VOCs in excess of a weighted
52 average VOC content of 0.34 kilograms per liter of coating (2.8
53 pounds per gallon), excluding water and solvents exempt from the

1 definition of ~~[volatile organic compound]~~ VOC, delivered to a
2 coating applicator from, but not limited to, filler, sealer,
3 groove coat, primer, stain, basecoat, ink, and topcoat operations.

4 (5) The emission limitations specified above shall be
5 achieved by:

6 (a) The application of low solvent technology; or

7 (b) The application of water-borne coating technology; or

8 (c) The application of ultraviolet-curable coating
9 technology; or.

10 (6) This regulation does not apply to the manufacture of
11 exterior siding, tile board, or particle board used as a furniture
12 component.

13 (7) Equivalency calculations for coatings shall be performed
14 in units of lbs. VOCs/gallon[s] of solid rather than lbs.
15 VOCs/gallon[s] of coating when determining compliance. The
16 equivalent emission limit for interior printed hardwood, plywood,
17 and particle board coating is 2.2 lbs. VOCs/gallon solids. The
18 equivalent emission limit for natural finish hardwood plywood
19 coating shall be 6.0 lbs. VOCs/gallon solids. The equivalent
20 emission limit for Class II hardwood panel finish operations is
21 4.5 lbs. VOCs/gallon solids.

22
23 **R307-340-11. Miscellaneous Metal Parts and Products VOC**
24 **Emissions.**

25 (1) R307-340-11 applies to the application areas, flash-off
26 areas air and forced air dryers, and ovens used in the surface
27 coating of miscellaneous metal parts and products:

28 (2) Applicable Industries:

29 (a) Large farm machinery (harvesting, fertilizing, planting,
30 tractors, combines, etc.)

31 (b) Small farm machinery (lawn and garden tractors, lawn
32 mowers, rototillers, etc.)

33 (c) Small appliance (fans, mixers, blenders, crock pots,
34 vacuum cleaners, etc.)

35 (d) Commercial machinery (computers, typewriters,
36 calculators, vending machines, etc.)

37 (e) Industrial machinery (pumps, compressors, conveyor
38 components, fans, blowers, transformers, etc.)

39 (f) Fabricated metal products (metal covered doors, frames,
40 trailer frames, etc.)

41 (g) Any other industrial category that coats metal parts or
42 products under the standard Industrial Classification Code of
43 major group 33 (primary metal industries), major group 34
44 (fabricated metal products), major group 35 (nonelectric
45 machinery), major group 36 (electrical machinery), major group 37
46 (transportation equipment) major group 38 (miscellaneous
47 instruments), and major group 39 (miscellaneous manufacturing
48 industries).

49 (h) This regulation does not apply to:

50 (i) the surface coating of automobiles and light-duty
51 trucks,

52 (ii) flat metal sheets and strips in the form of rolls or
53 coils,

1 (iii) exterior of airplanes,
2 (iv) automobile refinishing,
3 (v) exterior of marine vessels,
4 (vi) customized top coating of automobiles and trucks if
5 production is less than 35 vehicles per day,
6 (vii) a source whose potential VOC emissions are less than
7 10 tons/year. Potential emissions are based upon design capacity
8 (or maximum production), and 8760 hours/year, before add-on
9 controls. The potential emission level is determined on a plant-
10 wide basis, summing all individual emission sources within the
11 miscellaneous metal parts and products category.

12 (3) No owner or operator of a facility engaged in the
13 surface coating of miscellaneous metal parts and products may
14 cause, allow or permit discharge to the atmosphere of any
15 ~~[volatile organic compounds]~~VOCs in excess of:

16 (a) 0.52 kilograms per liter (4.3 pounds per gallon) of
17 coating, excluding water and solvents exempt from the definition
18 of ~~[volatile organic compound]~~VOC, delivered to a coating
19 applicator that applies clear coating;

20 (b) 0.42 kilograms per liter (3.5 pounds per gallon) of
21 coating, excluding water and solvents exempt from the definition
22 of ~~[volatile organic compound]~~VOC, delivered to a coating
23 applicator in a coating application system that utilizes air or
24 forced warm air at temperatures up to 90 degrees C (194 degrees
25 F);

26 (c) 0.42 kilograms per liter (3.5 pounds per gallon) of
27 coating, excluding water and solvents exempt from the definition
28 of ~~[volatile organic compound]~~VOC, delivered to a coating
29 applicator that applies extreme performance coatings;

30 (d) 0.36 kilograms per liter (3.0 pounds per gallon) of
31 coating, excluding water and solvents exempt from the definition
32 of ~~[volatile organic compound]~~VOC, delivered to a coating
33 applicator for all other coating and coating application systems.

34 (4) Equivalency calculations for coatings shall be performed
35 in units of lbs. VOCs/gallon of solid rather than lbs. VOCs/gallon
36 of coating when determining compliance. The equivalent emission
37 limit for air dried items is 6.7 lbs. VOCs/gallon solids. The
38 equivalent emission limit for clear-coated items is 10.3 lbs.
39 VOCs/gallon solids. The equivalent emission limit for extreme
40 performance coatings is 6.7 lbs. VOCs/gallon solids. The
41 equivalent emission limit for other coatings and systems is 5.1
42 lbs. VOCs/gallon solids.

43 (5) If more than one emission limitation indicated in this
44 section applies to a specific coating, then the least stringent
45 emission limitation shall apply. All ~~[volatile organic
46 compound]~~VOC emissions from solvent washing involved in a coating
47 process shall be considered in the emission limitations set forth
48 in R307-340-11(3), unless the solvent is directed into containers
49 that prevent evaporation into the atmosphere.

50 (6) The emission limitations set forth in (3) above shall be
51 achieved by:

52 (a) The application of low solvent technology; or

53 (b) An incineration system that oxidizes a minimum of 90

1 percent of the non-methane [~~volatile organic compounds~~]VOCs (VOCs
2 measure[s]d as total combustible carbon) to carbon dioxide and
3 water.

4 (7) The design, operation, and efficiency of any capture
5 system used in conjunction with (6)(b) above shall be certified in
6 writing by the owner or operator and approved by the executive
7 secretary.
8

9 **R307-340-12. Graphic Arts.**

10 (1) R307-340-12 applies to: packaging and publication
11 rotogravure; packaging and publication flexographic; and specialty
12 printing operations employing solvents containing ink and having
13 plant-wide potential emissions of [~~volatile organic compounds~~
14 +]VOCs[+] equal to or greater than 90 megagrams/yr (100 tons/yr).

15 Potential emissions shall be calculated based on uncontrolled
16 emissions operating at design capacity or at maximum production
17 for 8760 hours/year. (Solvent shall include that used for
18 dilution of ink and for equipment cleaning.) Machines that have
19 both coating units (application of a uniform layer of material
20 across the entire width of a web) and printing units (formation of
21 words, designs and pictures) shall be considered as performing a
22 printing operation. This rule does not apply to offset
23 lithography or letter press printing that do not use [~~volatile~~
24 ~~organic compounds~~]VOCs.

25 (2) No owner or operator of a packaging and publication
26 rotogravure; packaging and publication flexographic, and specialty
27 printing operations employing solvent containing ink may operate,
28 cause, or allow or permit the operation of a facility unless:

29 (a) The volatile fraction of ink, as it is applied to the
30 substrate, contains 25.0 percent by volume or less of organic
31 solvent and 75.0 percent by volume or more of water; or

32 (b) The ink as it is applies to the substrate, less water,
33 contains 60.0 percent by volume or more nonvolatile material; or

34 (c) The owner or operator installs and operates;

35 (i) A carbon adsorption system that reduces the volatile
36 organic emissions from the capture system by a minimum of 90.0
37 percent by weight; or

38 (ii) An incineration system that oxidizes a minimum of 90.0
39 percent of the non-methane [~~volatile organic compounds~~ -]VOCs[-]
40 measured as total combustible carbon) to carbon dioxide and water.

41 (3) A capture system must be used in conjunction with the
42 emission control systems indicated in this section. The design
43 and operation of a capture system must be consistent with good
44 engineering practices and shall be required to provide for an
45 overall reduction in [~~volatile organic compound~~]VOC emissions of
46 at least:

47 (a) 75.0 percent where a publication rotogravure process is
48 employed;

49 (b) 65.0 percent where a packaging rotogravure process is
50 employed; or

51 (c) 60.0 percent where a flexographic printing process is
52 employed.
53

R307-340-13. Exemptions.

The requirements of R307-340-3 through 10 shall not apply to the following:

(1) sources whose emissions of ~~[volatile organic compounds]~~ VOCs are not more than 6.8 kilograms (15 pounds) in any 24 hour period, nor more than 1.4 kilograms (3 pounds) in any one (1) hour provided the emission rates are certified. These cutoffs apply to the emissions level on a plant-wide basis, and are determined by summing emissions from all coating operations within the same regulated category;

(2) sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance provided;

(a) the operation of the source is not an integral part of the production process; and

(b) the emissions from the source do not exceed 363 kilograms (800 pounds) in any one calendar month. These cutoffs apply to the emissions level on a plant-wide basis, and are determined by summing emissions from all coating operations within the same regulated category.

R307-340-14. Capture Systems.

The design, operation and efficiency of any capture system used in conjunction with any emission control system shall be certified in writing by the source owner or operator and approved by the executive secretary. Unless the capture system meets the requirements for a total enclosure, specified in section 60.713(b)(5)(i) of 40 CFR Part 60 Subpart SSS, or unless material balance techniques approved by the executive secretary are used to adequately determine overall VOC capture and destruction or recovery efficiency, the efficiency of the capture system will be determined by test methods approved by the executive secretary. Testing for capture efficiency shall be performed on a case-by-case basis as required by the executive secretary, and shall be consistent with EPA guidance. The requirements of R307-340-4(3)(d) apply to the capture and control device system. When capture and control device efficiency must be independently determined, the overall VOC emission percent reduction equals (percent capture efficiency x percent control device efficiency)/100.

R307-340-15. Testing and Monitoring.

(1) Upon request by the executive secretary, the owner or operator of a ~~[volatile organic compound]~~ VOC source required to comply with R307-340 shall demonstrate compliance by the method of this section or an alternative method approved by the executive secretary.

(2) Test procedures to determine compliance with R307-340 must be approved by the executive secretary and must utilize one of the following methods or an alternative method approved by the executive secretary or equivalent method.

(a) For surface coatings: EPA Reference Method 24 of 40 CFR Part 60

(b) For add-on control equipment: EPA Reference Methods 1 through 4, 18 and 25, of the 40 CFR Part 60;

(c) EPA 340/1-86-016 "A Guide for Surface Coating Calculations;" and

(d) EPA 450/3-84-019 "Procedures for Certifying Quantity of ~~[Volatile organic Compounds]~~ VOCs Emitted by Paint, Ink and Other Coatings."

(3) All tests shall be made by, or under the direction of, a person qualified by training or experience, or both, in the field of air pollution testing. The executive secretary will evaluate test data submitted.

(4) A person proposing to conduct a ~~[volatile organic compound]~~ VOC emissions test shall notify the executive secretary of the intent to test not less than 30 days before the proposed initiation of the test. The notification shall contain the information required by, and be in a format approved by, the executive secretary.

(5) If add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:

(a) Exhaust gas temperatures of all incinerators;

(b) Temperature rise across a catalytic incinerator bed;

(c) Breakthrough of VOCs on a carbon adsorption unit; and

(d) Any other continuous monitoring or recording device required by the executive secretary.

(6) The executive secretary may accept, instead of the testing required in R307-340-15, a certification by the manufacturer of the composition of the coatings if supported by actual batch formulation records. The owner or operator of a VOC source required to comply with R307-340 must obtain certification from the coating manufacturers that the test methods used for determination of the VOC content meet the requirements specified in (2) above. The owner or operator shall make this certification readily available to the Division of Air Quality to allow the results to be used in the daily compliance calculations specified in R307-340-4(5).

(7) The performance of add-on control equipment shall be demonstrated with the required test methods of (2) above at equipment start up and after any major modification to the control equipment. Baseline operating parameters shall be established during the satisfactory (i.e. in-compliance) operation of the control equipment, including operation during all anticipated ranges of process throughput. During subsequent process operation, the owner or operator shall maintain the operating conditions of the add-on controls as close to these baseline conditions as possible. If serious operational problems with an add-on control system are indicated by the daily monitoring required by R307-340-4(2)(d), (such problems may be indicated by changes from baseline conditions), repeat performance tests shall be performed by the owner or operator, and may be required by the executive secretary, as necessary.

(8) To determine compliance with the applicable standards in

Change to Proposed Rule R307-340

R307-340, samples shall be taken from the coating as freshly delivered to the reservoir of the coating applicator. All VOC emissions from solvent washing involved in a coating process shall be considered in determining compliance with an emission limit, unless the source owner or operator documents that the VOCs from solvent washing are collected and disposed of in a manner that prevents their evaporation into the atmosphere.

R307-340-16. Alternate Methods of Control.

(1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-340, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.

(2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all tests, monitoring, and inspections required by R307-340 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, VOCs and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

R307-340-16. Compliance Schedule.

All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

KEY: air pollution, emission controls, surface coating, ozone

Date of Enactment or Last Substantive Amendment: 2006

Notice of Continuation: August 5, 2003

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

Original Proposal for R307-341

Notice of Continuation: August 5, 2003

Authorizing, and Implemented or Interpreted Law: ~~19-2-101~~
19-2-104(1)(a)

Environmental Quality, Air Quality R307-341

Davis and Salt Lake Counties and Ozone Nonattainment Areas: Cutback Asphalt

NOTICE OF PROPOSED RULE

(Amendment)

DAR File No.: 29010

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-342, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-342 (DAR No. 29011); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-341 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-341. In addition, the definition for the term "asphalt" has been moved from Section R307-101-2 to Rule R307-341. This definition comes from the Control Technique Guidance (CTG) titled, Control of Volatile Organic Compounds from use of Cutback Asphalt, EPA-450/2-077-037, December 1977, and was added to the general definitions when this Reasonably Available Control Technology (RACT) rule was adopted in the early 1980s. The term "asphalt" is used in several other rules; however, in those rules the common usage of the term "asphalt" is more appropriate than the specific language in this definition. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.

❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.

❖ OTHER PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY

AIR QUALITY

150 N 1950 W

SALT LAKE CITY UT 84116-3085, or

at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-341. ~~[Davis and Salt Lake Counties and]~~ Ozone Nonattainment and Maintenance Areas: Cutback Asphalt.

R307-341-1. Purpose.

This rule establishes reasonably achievable control technology (RACT) requirements for the use or application of cutback asphalt in ozone nonattainment and maintenance areas.

R307-341-2. Applicability.

R307-341 applies to any person who uses or applies asphalt in any ozone nonattainment or maintenance area.

R307-341-[1]3. Definitions.

~~[(1) R307-325 establishes applicability and general requirements for R307-341.~~

~~(2) The following additional definitions apply to R307-341:~~

~~"Asphalt or Asphalt Cement" means the dark brown to black cementitious material, either solid, semisolid or liquid in consistency, of which the main constituents are bitumens that occur naturally or as a residue of petroleum refining.~~

~~"Asphalt Concrete" means a waterproof and durable paving material composed of dried aggregate [which] that is evenly coated with hot asphalt cement.~~

~~"Cutback Asphalt" means any asphalt [which] that has been liquified by blending with petroleum solvents (dilutents) or, in the case of some slow cure asphalts (road oils), which have been produced directly from the distillation of petroleum.~~

~~"Emulsified Asphalt" means asphalt emulsions produced by combining asphalt with water that contains an emulsifying agent.~~

~~"Patch Mix" means a mixture of an asphalt binder and aggregate in which cutback or emulsified asphalts are used either as sprayed liquid or as a binder.~~

~~"Penetrating Prime Coat" means an application of low-viscosity liquid asphalt to an absorbent surface in order to prepare it for paving with asphaltic concrete.~~

R307-341-[2]4. Limitations on ~~Content~~ Use of Cutback Asphalt.

~~[After December 31, 1982, a] No person shall cause, allow, or permit the use or application of cutback asphalt, or [an] emulsified asphalt containing more than 7 percent oil distillate, as determined by ASTM distillation test D-244, except as provided below:~~

~~(1) Where the use or application commences on or after October 1 of any year and such use or application is completed by April 30 of the following year;~~

~~(2) Where long-life (longer than 1 month) stockpile storage of patch mix is demonstrated to the executive secretary to be necessary;~~

~~(3) Where the asphalt is to be used solely as a penetrating prime coat;~~

~~(4) Where the user can demonstrate that there are no emissions of volatile organic compounds from the asphalt under conditions of normal use;~~

~~(5) Where the use or application is for the paving of parking lots smaller than 300 parking stalls.~~

R307-341-[3]5. Recordkeeping.

~~[A record shall be kept for] Any person subject to R307-341 shall keep records for at least two years of the types and amounts of cutback[,] or emulsified asphalt used, [and] the amounts of solvents added, and the location where the asphalt is applied. The records shall be made available to the executive secretary upon request.~~

R307-341-6. Compliance Schedule.

~~All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.~~

KEY: air pollution, emission controls, asphalt, solvent[*]

Date of Enactment or Last Substantive Amendment: ~~[September 15, 1998]~~ 2006

Notice of Continuation: August 5, 2003

Authorizing, and Implemented or Interpreted Law: ~~[19-2-101; 19-2-104(1)(a)]~~

Environmental Quality, Air Quality

R307-342

Davis, Salt Lake, Utah, and Weber Counties and Ozone Nonattainment Areas: Qualification of Contractors and Test Procedures for Vapor Recovery Systems for Gasoline Delivery Tanks

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE NO. 29011

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, clarifying distinction between Rules R307-342 and R307-328, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: Rules R307-342 and R307-328 work together to establish the Stage I Vapor Recovery requirements. In general, the provisions in Rule R307-328 apply to the refinery or bulk storage plant where gasoline is loaded into a truck for delivery, the transport vehicle, and the gas station where the gasoline is unloaded into the underground storage tank. Rule R307-342 establishes the requirements for the vapor tightness testing contractor. However, there are some provisions that do not follow this general split. Both rules have been revised to make this division clearer, so that each entity will find all of the applicable requirements in one rule, rather than split between two rules. In addition, references to Salt Lake and Davis Counties were replaced by the term "ozone maintenance

Original Proposal for R307-342

R307-341-[4]3. Definitions.

~~[(1) R307-325 establishes applicability and general requirements for R307-341.~~

~~—(2)—The following additional definitions apply to R307-341:~~

~~"Asphalt or Asphalt Cement" means the dark brown to black cementitious material, either solid, semisolid or liquid in consistency, of which the main constituents are bitumens that occur naturally or as a residue of petroleum refining.~~

~~"Asphalt Concrete" means a waterproof and durable paving material composed of dried aggregate [which] that is evenly coated with hot asphalt cement.~~

~~"Cutback Asphalt" means any asphalt [which] that has been liquified by blending with petroleum solvents (dilutents) or, in the case of some slow cure asphalts (road oils), which have been produced directly from the distillation of petroleum.~~

~~"Emulsified Asphalt" means asphalt emulsions produced by combining asphalt with water that contains an emulsifying agent.~~

~~"Patch Mix" means a mixture of an asphalt binder and aggregate in which cutback or emulsified asphalts are used either as sprayed liquid or as a binder.~~

~~"Penetrating Prime Coat" means an application of low-viscosity liquid asphalt to an absorbent surface in order to prepare it for paving with asphaltic concrete.~~

R307-341-[2]4. Limitations on [Content]Use of Cutback Asphalt.

~~[After December 31, 1982, a]No person shall cause, allow, or permit the use or application of cutback asphalt, or [an]emulsified asphalt containing more than 7 percent oil distillate, as determined by ASTM distillation test D-244, except as provided below:~~

~~(1) Where the use or application commences on or after October 1 of any year and such use or application is completed by April 30 of the following year;~~

~~(2) Where long-life (longer than 1 month) stockpile storage of patch mix is demonstrated to the executive secretary to be necessary;~~

~~(3) Where the asphalt is to be used solely as a penetrating prime coat;~~

~~(4) Where the user can demonstrate that there are no emissions of volatile organic compounds from the asphalt under conditions of normal use;~~

~~(5) Where the use or application is for the paving of parking lots smaller than 300 parking stalls.~~

R307-341-[3]5. Recordkeeping.

~~[A record shall be kept for]Any person subject to R307-341 shall keep records for at least two years of the types and amounts of cutback[,] or emulsified asphalt used, [and]the amounts of solvents added, and the location where the asphalt is applied. The records shall be made available to the executive secretary upon request.~~

R307-341-6. Compliance Schedule.

~~All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.~~

KEY: air pollution, emission controls, asphalt, solvent[*]

Date of Enactment or Last Substantive Amendment: ~~[September 15, 1998]~~2006

Notice of Continuation: August 5, 2003

Authorizing, and Implemented or Interpreted Law: ~~[19-2-101, 19-2-104(1)(a)]~~

Environmental Quality, Air Quality **R307-342**

Davis, Salt Lake, Utah, and Weber Counties and Ozone Nonattainment Areas: Qualification of Contractors and Test Procedures for Vapor Recovery Systems for Gasoline Delivery Tanks

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE No.: 29011

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, clarifying distinction between Rules R307-342 and R307-328, adding language to align the rule with the new ozone maintenance plan, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, and R307-343 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); and R307-343 (DAR No. 29012) in this issue.)

SUMMARY OF THE RULE OR CHANGE: Rules R307-342 and R307-328 work together to establish the Stage I Vapor Recovery requirements. In general, the provisions in Rule R307-328 apply to the refinery or bulk storage plant where gasoline is loaded into a truck for delivery, the transport vehicle, and the gas station where the gasoline is unloaded into the underground storage tank. Rule R307-342 establishes the requirements for the vapor tightness testing contractor. However, there are some provisions that do not follow this general split. Both rules have been revised to make this division clearer, so that each entity will find all of the applicable requirements in one rule, rather than split between two rules. In addition, references to Salt Lake and Davis Counties were replaced by the term "ozone maintenance

area". Other grammatical corrections were made throughout Rule R307-342 to improve the readability of the rule. Obsolete language was deleted throughout Rule R307-342. Further, the applicability, testing, and compliance provisions that were located in Section R307-325-1 were moved into Rule R307-342. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

- ❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ OTHER PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Jan Miller or Mat E. Carlile at the above address, by phone at 801-536-4042 or 801-536-4136, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at janmiller@utah.gov or MCARLILE@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-342. ~~[Davis, Salt Lake, Utah and Weber Counties and]Ozone Nonattainment and Maintenance Areas: Qualification of Contractors and Test Procedures for Vapor Recovery Systems for Gasoline Delivery Tanks.~~

R307-342-1. Purpose.

The purpose of R307-342 is to establish the requirements for the qualification of contractors to perform vapor tightness tests on gasoline transport vehicles equipped with vapor recovery equipment.

[R307-342-1. Testing Required Annually.

~~R307-328-6 requires that the gasoline delivery tanks and associated vapor recovery systems be tested for leakage at least annually by a qualified contractor approved by the executive secretary.~~

R307-342-2. [General] Applicability.

R307-342 is applicable to anyone who wishes to become qualified by the executive secretary to perform vapor tightness tests on gasoline transport ~~[vessels which]~~ vehicles that are required to be equipped with gasoline vapor recovery equipment and to be tested in accordance with R307-328-6[7].

[R307-342-3. General Requirements.

~~(1) A vapor recovery system is required on all gasoline delivery tanks loading at a terminal or nonexempt bulk plant or off loading at a stationary storage container in Davis, Salt Lake, Utah or Weber County or any ozone nonattainment area.~~

~~(2) The design of the vapor recovery system is to be such that when the delivery tank is connected to an approved storage tank vapor recovery system or loading terminal, 90% vapor recovery efficiencies are realized. The connectors of the delivery tanks need to be compatible with the fittings on the fill pipes and vapor vents at the storage containers and gasoline loading terminals where the delivery tank will service or be serviced. Adapters may be used to achieve compatibility.~~

~~(3) No person may operate a gasoline delivery tank in Davis, Salt Lake, Utah or Weber County or any ozone nonattainment area unless the tank is certified leak tight. The owner or operator of any delivery tank must insure that the tank is vapor tight according to the requirements of R307-328-6, by having the tank satisfactorily pass the test requirements described in these procedures or other procedures approved by the executive secretary when performed by a contractor who has been qualified by the executive secretary. Each tank must be certified at least annually.~~

~~(4) R307-328-6(3) requires, "the tank shall not sustain a pressure change of more than 750 pascals (3 inches of H₂O) in five minutes when pressurized (by air or inert gas) to 4500 pascals (18 inches of H₂O), or evacuated to 1500 pascals (6 inches of H₂O)" during the annual certification test for vapor tightness.~~

R307-342-4[3]. Contractor Qualification Requirements.

~~(1) [The executive secretary has determined that a]~~Any person may become qualified to perform delivery tank vapor tightness tests by:

(a) ~~[P]reparing a written, detailed and approvable procedure by which the person proposes to conduct the pressure/vacuum test. The minimum test performance requirements are described in R307-342-6[5] and R307-342-7[6]-;~~

(b) ~~[S]ubmitting the procedure with a letter requesting approval of the procedure and qualification of the person as a qualified testing contractor[-];~~

(c) ~~[H]~~having the necessary facilities, equipment and expertise to perform a satisfactory test~~[-]; and~~

(d) ~~[P]~~performing an acceptable demonstration test with a representative of the executive secretary in attendance.

(2) The person determined qualified to perform the tests will be issued a letter of qualification by the executive secretary valid for one year.

(3) Re-qualification will be accomplished by:

(a) ~~[R]~~requesting by letter to be requalified by the executive secretary; and

(b) ~~[P]~~performing an acceptable demonstration test with a representative of the executive secretary in attendance after which a letter of requalification will be sent.

R307-342-[5]4. Equipment Requirements.

(1) Pressure Source. An air pump, shop compressed air, compressed gas tanks of air or inert gas, or other approved air pressure producing source or procedure sufficient to pressurize the tank to 18 inches of water above atmospheric pressure is required. Some models of reversible tank-type shop vacuum cleaners will perform adequately.

(2) Vacuum Source. A vacuum pump or other approved vacuum producing procedure capable of evacuating the tank to 6 inches of water is required. For example, some models of shop vacuum cleaners can accomplish this function.

(3) Pressure. ~~[-]A~~ ~~[V]~~vacuum ~~[S]~~supply ~~[H]~~hose~~[-A hose]~~ must be of sufficient length and wall strength to reach from the tank to the pressure vacuum source.

(4) Manometer. A liquid manometer or equivalent instrument must be capable of measuring up to 25 inches of water with scale division of 0.1 inches of water. A 1/4-inch hose to connect the manometer to the adapter tap is recommended.

(5) Stopwatch. A stopwatch with scale division to one second is required.

(6) Adapter. An adapter to connect the pressure vacuum hose to the tank with a shutoff valve to isolate the tank from the required pressure vacuum equipment is required. The adapter requires a shutoff valve, a tap to attach the manometer, and a bleed valve for adjusting pressure/vacuum to specified levels prior to start of timed period. However, each contractor must use an adapter compatible with his equipment.

(7) Caps. Dust caps with good gaskets are required on all outlets during the test.

(8) Pressure/Vacuum Relief Valves. The test apparatus should be equipped with an in line pressure/vacuum relief valve set to activate at 25 inches of water above atmospheric and 12 inches of water below if the pressure/vacuum equipment has greater capacity than the set points to prevent possible tank damage.

R307-342-[6]5. Test Procedures and Preparations.

(1) Location. The delivery tank must be tested in a location where it will not be subject to direct sunlight. Shop heaters/air conditioners must be turned off during the test as they will affect the tank stability.

(2) Purging the Tank. A good purge is necessary.

(a) The tank must be emptied of gasoline and vapors before testing to minimize "vapor growth" problems. Hauling a load of diesel fuel is recommended.

(b) A steam purge to degas the tank is acceptable.

(c) An alternate method is to purge with a high volume of air. For this purge, the hatches are to be opened and purge air or inert gas

should be blown through the tank for 30 minutes or more to degas the tank. This method is not as effective and often requires a much longer time for stabilization during the test.

(3) Visual Inspection. While the tank is being purged, or prior to the test, the entire tank should be visually inspected for evidence of wear, damage or misadjustments that could be a source of potential leaks. Areas to check are domes, dome vents, cargo tank piping, hose connections, hoses and delivery elbows. Any part found defective should be adjusted, repaired or replaced as necessary before the pressure test is started.

(4) Vents, Valves, and Outlets.

(a) The emergency valves in the bottom of the tank must be opened during the purge and then closed to test.

(b) Open the top vents. If the top vents are the pneumatic type, then a shop air line connection must be provided as the vents must be in the open position during the purge and then closed to test.

(c) In order to complete the test, some types of dome vents may have to be replaced.

(d) During the test, all compartments must be interconnected so that the tank may be tested as a single unit. If this cannot be done, each compartment must be tested as a separate tank.

(e) Dust caps with good gaskets must be installed on all outlets.

(5) Pretest Preparation and Procedure.

(a) Open and close each dome cover.

(b) Connect the static electric ground connections to tank, attach the liquid delivery and vapor return hoses, remove liquid delivery elbows and seal the liquid delivery hose fitting, install dust caps on all outlets except the vapor return hose.

(c) Attach the test adapter to the vapor return hose of the tank under test with the shutoff valve closed.

(d) Connect the pressure supply hose to the adapter.

(e) Connect the 1/4-inch hose to the adapter tap and the manometer if applicable and position of the manometer or gauge at eye level.

(f) Open all internal vents and valves if possible. If not possible, each compartment must be tested as if each compartment was a separate tank.

(6) The Pressure Test.

(a) With all preparations complete, turn on the pressure source and open the shutoff valve in the adapter to apply air pressure slowly. Pressurize the tank to 18 inches of water.

(b) Close the shutoff valve and allow the pressure in the tank to stabilize. When the pressure has stabilized, read and record the time and initial pressure on the manometer.

(c) Allow five minutes to elapse, then read and record the final time and pressure.

(d) Disconnect the pressure source from the adapter and slowly open the shutoff valve to bring the tank to atmospheric pressure.

(e) Subtract the final pressures from the initial pressures.

(f) If the sustained pressure drop is greater than 3.0 inches of water, repair the leaks and then repeat the steps in (a) through (e).

(g) Repeat the steps in (a) through (f) until the change in pressure for two consecutive runs agrees within 1/2 inch of water. Calculate the arithmetic average of the two results.

(7) The Vacuum Test.

(a) Connect the vacuum source to the adapter. Start the vacuum source and slowly open the shutoff valve to evacuate the tank to six inches of water and close the shutoff valve.

(b) Allow the pressure in the tank to stabilize, adjust as necessary to maintain six inches of water vacuum until the pressure stabilizes.

- (c) Read and record the time and the initial vacuum reading on the manometer. Allow five minutes to elapse, then read and record the final manometer reading.
- (d) Disconnect the vacuum source from the adapter, and slowly open the shutoff valve to bring the tank to atmospheric pressure.
- (e) Subtract the final reading from the initial reading.
- (f) If the sustained vacuum loss is greater than three inches of water, the leakage source must be located and repaired. The steps in (a) through (e) must be repeated.
- (g) Repeat the steps in (a) through (f) until the change in vacuum for two consecutive runs agree within 1/2 inches of water. Calculate the arithmetic average of the two results.
- (8) When the calculated average pressure change in five minutes for both the pressure test and the vacuum test are three inches of water or less, the requirements of the test are satisfied and the tested tank may be certified leak tight.

R307-342-[7]6. Certification of a Delivery Tank.

- (1) The approved contractor will upon satisfactory completion of the vapor tightness test complete the documentation of certification in two copies. If desired, each contractor may prepare his own certificate as long as the following items are included:
- Gasoline delivery tank pressure test.
 - Tank owner and address.
 - Tank ID number.
 - Testing location.
 - Date of test.
 - Tester name and signature.
 - Company or affiliation of testers.
 - Test data results.
 - Date of next required test.
- (2) The contractor will keep one copy [which] that will be made available for inspection by the executive secretary for two years. The tank owner or operator will keep the other copy of the certification with the delivery tank for two years for inspection by the executive secretary.
- (3) The approved contractor will mark the certified tank below the DOT test marking with "V.R. TESTED" followed by the month and year of the current certified test. The vapor recovery test marking shall be at least 1-1/4" high black permanent letters on a white background. The letters and numbers must be of a type that will remain legible from a distance of 20 feet for at least one year (painted or printed sticker is acceptable).

R307-342-7. Alternate Methods of Control.

- (1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-342, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.
- (2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all

tests, monitoring, and inspections required by R307-342 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, volatile organic compounds and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

KEY: air pollution, ozone, gasoline transport[*]

Date of Enactment or Last Substantive Amendment: [July 15, 1999]2006

Notice of Continuation: April 22, 2002

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

Environmental Quality, Air Quality R307-343 Davis and Salt Lake Counties and Ozone Nonattainment Areas: Emissions Standards for Wood Furniture Manufacturing Operations

NOTICE OF PROPOSED RULE (Amendment)

DAR FILE NO.: 29012

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, and R307-342 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); and R307-342 (DAR No. 29011) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-343 to improve the readability of

Original Proposal for R307-343

(c) Read and record the time and the initial vacuum reading on the manometer. Allow five minutes to elapse, then read and record the final manometer reading.

(d) Disconnect the vacuum source from the adapter, and slowly open the shutoff valve to bring the tank to atmospheric pressure.

(e) Subtract the final reading from the initial reading.

(f) If the sustained vacuum loss is greater than three inches of water, the leakage source must be located and repaired. The steps in (a) through (e) must be repeated.

(g) Repeat the steps in (a) through (f) until the change in vacuum for two consecutive runs agree within 1/2 inches of water. Calculate the arithmetic average of the two results.

(8) When the calculated average pressure change in five minutes for both the pressure test and the vacuum test are three inches of water or less, the requirements of the test are satisfied and the tested tank may be certified leak tight.

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- (a) Gasoline delivery tank pressure test.
- (b) Tank owner and address.
- (c) Tank ID number.
- (d) Testing location.
- (e) Date of test.
- (f) Tester name and signature.
- (g) Company or affiliation of testers.
- (h) Test data results.
- (i) Date of next required test.

(2) The contractor will keep one copy [which] that will be made available for inspection by the executive secretary for two years. The tank owner or operator will keep the other copy of the certification with the delivery tank for two years for inspection by the executive secretary.

(3) The approved contractor will mark the certified tank below the DOT test marking with "V.R. TESTED" followed by the month and year of the current certified test. The vapor recovery test marking shall be at least 1-1/4" high black permanent letters on a white background. The letters and numbers must be of a type that will remain legible from a distance of 20 feet for at least one year (painted or printed sticker is acceptable).

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(1) Any person may apply to the executive secretary for approval of an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule. The application must include a demonstration that the proposed alternate produces an equal or greater air quality benefit than that required by R307-342, or that the alternate test method is equivalent to that required by these rules. The executive secretary shall obtain concurrence from EPA when approving an alternate test method, an alternate method of control, an alternate compliance period, an alternate emission limit, or an alternate monitoring schedule.

(2) Manufacturer's operational specifications, records, and testings of any control system shall use the applicable EPA Reference Methods of 40 CFR Part 60, the most recent EPA test methods, or EPA-approved state methods, to determine the efficiency of the control device. In addition, the owner or operator must meet the applicable requirements of record keeping for any control device. A record of all

tests, monitoring, and inspections required by R307-342 shall be maintained by the owner or operator for a minimum of 2 years and shall be made available to the executive secretary or the executive secretary's representative upon request. Any malfunctioning control device shall be repaired within 15 calendar days after it is found by the owner or operator to be malfunctioning, unless otherwise approved by the executive secretary.

(3) For purposes of determining compliance with emission limits, volatile organic compounds and nitrogen oxides will be measured by the test methods identified in federal regulation or approved by the executive secretary. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emissions standard.

KEY: air pollution, ozone, gasoline transport[*]

Date of Enactment or Last Substantive Amendment: [July 15, 1999]2006

Notice of Continuation: April 22, 2002

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

Environmental Quality, Air Quality **R307-343** Davis and Salt Lake Counties and Ozone Nonattainment Areas: Emissions Standards for Wood Furniture Manufacturing Operations

NOTICE OF PROPOSED RULE

(Amendment)

DAR FILE NO.: 29012

FILED: 09/07/2006, 16:07

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to clarify the rule by deleting obsolete language, and making other minor grammatical corrections. This amendment is part of revisions to rules related to the ozone maintenance plan (see separate filings on Sections R307-101-2 and R307-110-13; and Rules R307-320, R307-325, R307-326, R307-327, R307-328, R307-332, R307-335, R307-340, R307-341, and R307-342 in this issue.) (DAR NOTE: The other filings are under: Sections R307-101-2 (DAR No. 29000) and R307-110-13 (DAR No. 29001); and Rules R307-320 (DAR No. 29002); R307-325 (DAR No. 29003); R307-326 (DAR No. 29006); R307-327 (DAR No. 29004); R307-328 (DAR No. 29005); R307-332 (DAR No. 29007); R307-335 (DAR No. 29008); R307-340 (DAR No. 29009); R307-341 (DAR No. 29010); and R307-342 (DAR No. 29011) in this issue.)

SUMMARY OF THE RULE OR CHANGE: References to Salt Lake and Davis Counties were replaced by the term "ozone maintenance area". Other grammatical corrections were made throughout Rule R307-343 to improve the readability of

the rule. Obsolete language was deleted throughout Rule R307-343 including old compliance dates. This amendment is part of revisions to rules related to the ozone maintenance plan (see DAR NOTE above). Rule R307-343 is not federally enforceable and the rule has not been submitted to the Environmental Protection Agency as part of the State Implementation Plan for Utah.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsections 19-2-104(1)(a) and 19-2-104(3)(e)

ANTICIPATED COST OR SAVINGS TO:

- ❖ THE STATE BUDGET: Because these revisions do not create any new requirements, no change in costs is expected to the state budget.
- ❖ LOCAL GOVERNMENTS: Because these revisions do not create any new requirements, no change in costs is expected for local governments.
- ❖ OTHER PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Because these revisions do not create any new requirements, no change in costs is expected for affected persons.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Because these revisions do not create new requirements, no change to costs is expected for businesses. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile or Jan Miller at the above address, by phone at 801-536-4136 or 801-536-4042, by FAX at 801-536-0085 or 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov or janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 10/31/2006

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 10/17/2006 at 2:00 PM, DEQ Building, 168 N 1950 W, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 12/07/2006

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-343. ~~[Davis and Salt Lake Counties and]~~Ozone Nonattainment and Maintenance Areas: Emissions Standards for Wood Furniture Manufacturing Operations.

R307-343-1. Purpose.

(1) The purpose of R307-343 is to limit volatile organic compound emissions from wood furniture manufacturing sources located in ~~[Davis and Salt Lake Counties and]~~ ozone nonattainment or maintenance areas.

R307-343-2. Applicability.

Provisions of R307-343 apply to each wood furniture manufacturing source that is not an incidental wood furniture manufacturer, has the potential to emit 25 tons or more per year of volatile organic compounds and is located in ~~[Salt Lake County, Davis County, or]~~ any ozone nonattainment or maintenance area.

R307-343-3. Definitions.

The following additional definitions apply to R307-343:

"Affected Source" means a wood furniture manufacturing source that meets the criteria in R307-343-2.

"Alternat[iv]e Method" means any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but that has been demonstrated to the executive secretary's satisfaction to, in specific cases, produce results adequate for a determination of compliance.

"As Applied" means the volatile organic compound and solids content of the finishing material that is actually used for coating the substrate. It includes the contribution of materials used for in-house dilution of the finishing material.

"Basecoat" means a coat of colored material, usually opaque, that is applied before graining inks, glazing coats, or other opaque finishing materials, and is usually topcoated for protection.

"Capture Device" means a hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.

"Capture Efficiency" means the fraction of all organic vapors generated by a process that is directed to a control device.

"Certified Product Data Sheet (CPDS)" means documentation furnished by a coating supplier or an outside laboratory that provides the volatile organic compound content by percent weight, the solids content by percent weight, and the density of a finishing material, strippable booth coating, or solvent, measured using EPA Method 24 or an equivalent or alternat[iv]e method, or formulation data if the coating meets the criteria specified in R307-343-7(1). The purpose of the CPDS is to assist the affected source in demonstrating compliance with the emission limitations presented in Subsection R307-343-4.

"Cleaning Operations" means operations in which organic solvent is used to remove coating materials from equipment used in wood furniture manufacturing operations.

"Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials may include paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings.

"Compliant Coating" means a finishing material or strippable booth coating that meets the emission limits specified in R307-343-4(1).

"Continuous Coater" means a finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor system. Finishing materials that are not transferred to the part are recycled to the finishing material reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roll coating, dip coating, and flow coating.

"Continuous Compliance" means that the affected source meets the emission limitations and other requirements of R307-343 at all times and fulfills all monitoring and recordkeeping provisions of R307-343 in order to demonstrate compliance.

"Control Device" means any equipment that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Control devices include, but are not limited to, incinerators, carbon adsorbers, and condensers.

"Control Device Efficiency" means the ratio of the pollution released by a control device and the pollution introduced to the control device, expressed as a fraction.

"Control System" means the combination of capture and control devices used to reduce emissions to the atmosphere.

"Conventional Air Spray" means a spray coating method in which the coating is atomized by mixing it with compressed air at an air pressure greater than 10 pounds per square inch (gauge) at the point of atomization. Airless, air assisted airless spray technologies, and electrostatic spray technology are not considered conventional air spray.

.....

"Permanent Total Enclosure" means a permanently installed enclosure that completely surrounds a source of emissions such that all emissions are captured and contained for discharge through a control device, and ~~which~~ that meets the criteria presented in Subsection R307-343-7(5)(a)(i) through (iv).

"Reference Method" means any method of sampling and analyzing for an air pollutant that is published in Appendix A of 40 CFR 60.

"Responsible Official" has the same meaning as in R307-415, Operating Permit Requirements.

"Sealer" means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. A washcoat used to optimize aesthetics is not a sealer.

"Solids" means the part of the coating that remains after the coating is dried or cured; solids content is determined using data from EPA Method 24, or an alternate ~~iv~~ e or equivalent method approved by the executive secretary.

"Solvent" means a liquid used in a coating for dissolving or dispersing constituents in a coating, adjusting the viscosity of a coating, cleaning, or washoff. When used in a coating, it evaporates during drying and does not become a part of the dried film.

"Stain" means any color coat having a solids content by weight of no more than 8.0 percent that is applied in single or multiple coats directly to the substrate, including nongrain raising stains, equalizer stains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

"Strippable Booth Coating" means a coating that:

- (1) is applied to a booth wall to provide a protective film to receive overspray during finishing operations;
- (2) is subsequently peeled off and disposed; and
- (3) by achieving (1) and (2), reduces or eliminates the need to use organic solvents to clean booth walls.

"Substrate" means the surface onto which coatings are applied, or into which coatings are impregnated.

"Temporary Total Enclosure" means an enclosure that meets the requirements of Subsection R307-343-7(5)(a)(i) through (iv) and is not permanent, but is constructed only to measure the capture efficiency of pollutants emitted from a given source. Additionally, any exhaust point from the enclosure shall be at least 4 equivalent duct or hood diameters from each natural draft opening.

"Topcoat" means the last film-building finishing material applied in a finishing system. Non-permanent final finishes are not topcoats.

"Touch-up and Repair" means the application of finishing materials to cover minor finishing imperfections.

"Washcoat" means a transparent special purpose coating having a solids content by weight of 12.0 percent or less that is applied over initial stains to protect and control color and to stiffen the wood fibers in order to aid sanding.

"Washoff Operations" means those operations in which organic solvent is used to remove coating from a substrate.

"Wood Furniture" means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

"Wood Furniture Manufacturing Operations" means the finishing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

"Working Day" means a day, or any part of a day, in which a source is engaged in manufacturing.

R307-343-5. Work Practice Standards.

(1) Work Practice Implementation Plan.

(a) Each owner or operator of an affected source subject to R307-343 shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the topics specified in R307-343-5(2) through (10). ~~[-The plan shall be completed no later than August 1, 1999.]~~ The owner or operator of the affected source shall comply with each provision of the work practice implementation plan. The written work practice implementation plan shall be available for inspection by the executive secretary, upon request. If the executive secretary determines that the work practice implementation plan does not adequately address each of the topics specified in (2) through (10) below or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the executive secretary may require the affected source to modify the plan.

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R307-343-6. Compliance Procedures and Monitoring Requirements.

(1) Methodology. Terms and equations required in the calculation of compliance are found in Appendix B, "Control of Organic Compound Emissions from Wood Furniture Manufacturing Operations." EPA-453/R-96-007, April 1996. The terms found in B.3(b) on pages B-10 and B-11, Equation 3 on page B-18, Equations 4, 5, 6, and 7 on pages B-26 and B-27 are hereby adopted and incorporated by reference. Copies are available at the Division of Air Quality, the Division of Administrative Rules and most state depository libraries.

(4) Continuous Compliance Demonstrations.

(a) Each owner or operator of an affected source subject to the provisions of R307-343-4 that comply using the procedures established in R307-343-6(2)(a) shall demonstrate continuous compliance by using compliant materials, maintaining records that demonstrate the materials are compliant, and submitting a compliance certification with the semiannual report required by R307-343-9(3).

(i) The compliance certification shall state that compliant sealers, topcoats and strippable booth coatings have been used during the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance.

(ii) The compliance certification shall be signed by a responsible official.

(b) Each owner or operator of an affected source subject to the provisions of R307-343-4 that comply using the procedures established in R307-343-6(2)(a) and applies sealers or topcoats using continuous coaters shall demonstrate continuous compliance by following the procedures in (i) or (ii) below.

(i) Use compliant materials, as determined by the volatile organic compound content of the finishing material in the reservoir and the volatile organic compound content as calculated from records, and submit a compliance certification with the semiannual report required by R307-343-9(3).

(A) The compliance certification shall state that compliant sealers and topcoats have been used during the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance.

(B) The compliance certification shall be signed by a responsible official.

(ii) Use compliant materials, as determined by the volatile organic compound content of the finishing material in the reservoir, maintaining a viscosity of the finishing material in the reservoir that is no less than the viscosity of the initial finishing material by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial finishing material and retesting the material in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a compliance certification with the semiannual report required by R307-343-9(3).

(A) The compliance certification shall state that compliant sealers and topcoats, as determined by the volatile organic compound content of the finishing material in the reservoir, have been used during the semiannual reporting period. Additionally, the certification shall state that the viscosity of the finishing material in the reservoir has not been less than the viscosity of the initial finishing material, that is, the material that is initially mixed and placed in the reservoir, during the semiannual reporting period.

(B) The compliance certification shall be signed by a responsible official.

(C) An affected source is in violation of the standard when a sample of the finishing material as applied exceeds the applicable limit established in R307-343-4(1)(a), (b), or (c), as determined using EPA Method 24 or an alternate or equivalent method, or the viscosity of the finishing material in the reservoir is less than the viscosity of the initial finishing material.

(c) Each owner or operator of an affected source subject to the provisions of R307-343-4 that complies using a control system, capture device or control device shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to manufacturers specifications.

(i) Where a capture or control device is used, a device to monitor the site-specific operating parameter established in accordance with R307-343-6(3)(c)(i) is required.

(ii) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(A) Where a thermal incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(B) Where a catalytic incinerator equipped with a fixed catalyst bed is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(C) Where a catalytic incinerator equipped with a fluidized catalyst bed is used, a temperature monitoring device shall be installed in the gas stream immediately before the bed. In addition, a pressure monitoring device shall be installed to determine the pressure drop across the catalyst bed. The pressure drop shall be measured monthly at a constant flow rate.

(iii) Where a carbon adsorber is used, one of the following monitoring devices shall be used:

(A) An integrating regeneration stream flow monitoring device having an accuracy of plus or minus 10 percent, capable of recording the total regeneration stream mass flow for each regeneration cycle; and a carbon bed temperature monitoring device having an accuracy of plus or minus one percent of the temperature being monitored expressed in degrees Celsius, or plus or minus 0.5 C, whichever is greater, capable of recording the carbon bed temperature after each regeneration and within fifteen minutes of completing any cooling cycle;

(B) An organic monitoring device, equipped with a continuous recorder, to indicate the concentration level of organic compounds exiting the carbon adsorber; or

(C) Any other monitoring device that has been approved by the executive secretary as allowed under (vi) below.

(iv) Each owner or operator of an affected source shall not operate the capture or control device at a daily average value greater than or less than the operating parameter value, as defined in the plan required by R307-343-6(3)(c)(i). The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day.

(v) Each owner or operator of an affected source that complies through the use of a catalytic incinerator equipped with a fluidized catalyst bed shall maintain a constant pressure drop, measured monthly, across the catalyst bed.

(vi) An owner or operator using a control device not listed in R307-343-6(3)(c) shall submit to the executive secretary a description of the device, test data verifying the performance of the device, and appropriate operating parameter values that will be monitored to demonstrate continuous compliance with the standard. Use of this device to demonstrate compliance is subject to the executive secretary's approval.

(d) Each owner or operator of an affected source subject to the work practice standards in R307-343-5 shall demonstrate continuous compliance by following the work practice implementation plan and submitting a compliance certification with the semiannual report required by R307-343-9(3).

(i) The compliance certification shall state that the work practice implementation plan was followed, or should otherwise identify the periods of noncompliance with the work practice standards.

(ii) The compliance certification shall be signed by a responsible official.

R307-343-7. Performance Test Methods.

(1) The EPA Method 24 (40 CFR 60) shall be used to determine the volatile organic compound content and the solids content by weight of the finishing materials as supplied by the manufacturer. The owner or operator of the affected source may request approval from the executive secretary to use an alternate or equivalent method for determining the volatile organic compound content of the finishing material. Batch formulation information may be accepted by the executive secretary if the source demonstrates that a finishing material does not release volatile organic compound reaction byproducts during the cure. If the EPA Method 24 value is higher than the source's formulation data, the EPA Method 24 test shall govern. Sampling procedures shall follow the guidelines in "Standard Procedures for Collection of Coating and Ink Samples for volatile organic compound Content Analysis by Reference Method 24 and Reference Method 24A," EPA-340/1-91-010.

(2) Each owner or operator using a control system to demonstrate compliance shall determine the overall control efficiency of the control system as the product of the capture and control device efficiencies, using the test methods cited in (3) below and the procedures in (4) or (5) below.

(3) Each owner or operator using a control system shall demonstrate initial compliance using the procedures in (a) through (f) below.

(a) The EPA Method 18, 25, or 25A shall be used to determine the volatile organic compound concentration of gaseous air streams. The test shall consist of three separate runs, each lasting a minimum of 30 minutes.

(b) The EPA Method 1 or 1A shall be used for sample and velocity traverses.

(c) The EPA Method 2, 2A, 2C, or 2D shall be used to measure velocity and volumetric flow rates.

(d) The EPA Method 3 shall be used to analyze the exhaust gases.

(e) The EPA Method 4 shall be used to measure the moisture in the stack gas.

(f) The EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(4) Each owner or operator using a control system to demonstrate compliance with R307-343 shall use the procedures in (a) through (f) below.

(a) Construct the overall volatile organic compound control system so that volumetric flow rates and volatile organic compound concentrations can be determined by the test methods specified in R307-343-7(3);

(b) Measure the capture efficiency from the affected emission points by capturing, venting, and measuring all volatile organic compound emissions from the affected emission points. To measure the capture efficiency of a capture device located in an area with nonaffected volatile organic compound emission points, the affected emission points shall be isolated from all other volatile organic compound sources by one of the following methods:

(i) Build a temporary total enclosure around the affected emission points;

(ii) Shut down all nonaffected volatile organic compound emission points and continue to exhaust fugitive emissions from the affected emission points through any building ventilation system and other room exhausts such as drying ovens. All exhaust air must be vented through stacks suitable for testing; or

(iii) Use another methodology approved by the executive secretary provided it complies with the EPA criteria for acceptance under 40 CFR Part 63, Appendix A, Method 301.

(c) Operate the control system with all affected emission points connected and operating at maximum production rate;

(d) Determine the efficiency of the control device using Equation 4;

(e) Determine the efficiency of the capture system using Equation 5;

(f) Compliance is demonstrated if the overall control efficiency in Equation 6 is greater than or equal to the overall control efficiency calculated by Equation 3, in accordance with R307-343-6(2)(b)(i).

(5) An alternate to the compliance method presented in (4) above is the installation of a permanent total enclosure.

(a) Each affected source that complies using a permanent total enclosure shall demonstrate that the total enclosure meets the following requirements:

(i) The total area of all natural draft openings shall not exceed five percent of the total surface area of the enclosure's walls, floor, and ceiling;

(ii) All sources of emissions within the enclosure shall be a minimum of four equivalent diameters away from each natural draft opening;

(iii) Average inward face velocity (FV) across all natural draft openings shall be a minimum of 3,600 meters per hour or 200 feet per minute as determined by the following procedures:

(A) All forced makeup air ducts and all exhaust ducts are constructed so that the volumetric flow rate in each can be accurately determined by the test methods and procedures specified in (3)(b) and (3)(c) above. Volumetric flow rates shall be calculated without the adjustment normally made for moisture content; and

(B) Determine face velocity by Equation 7;

(iv) All access doors and windows whose areas are not included as natural draft openings and are not included in the calculation of face velocity shall be closed during routine operation of the process.

(b) Determine the control device efficiency using Equation 4, and the test methods and procedures specified in R307-343-7(3).

(c) For a permanent total enclosure, the capture efficiency in Equation 5 is equal to one.

(d) For owners or operators using a control system to comply with the provisions of R307-343, compliance is demonstrated if:

(i) The capture efficiency of the enclosure is determined to equal one; and

(ii) The overall efficiency of the control system calculated by Equation 6 in accordance with (4) above is greater than or equal to the overall efficiency of the control system calculated by Equation 3 in accordance with R307-343-6(2)(b).

R307-343-9. Reporting Requirements.

(1) The owner or operator of an affected source using a control system to fulfill the requirements R307-343 is subject to R307-214-2(1) in which the reporting requirements of 40 CFR Part 63, subpart A are incorporated by reference, ~~and to the following reporting requirements:~~

~~(2) The owner or operator of an affected source subject to R307-343 shall submit an initial compliance report no later than August 1, 1999. The report shall include the items required by R307-343-6(3).]~~

~~(3)(2) The owner or operator of an affected source subject to R307-343 and demonstrating compliance in accordance with R307-343-6(2)(a) or (b) shall submit a semiannual report covering the previous six months of wood furniture manufacturing operations.~~

~~(a) Reports shall be submitted on January 2 and July 2 each year, according to the following schedule:~~

(a) The first report shall be submitted no later than January 2, 2000.

(b) Subsequent reports shall be submitted no later than July 2 and January 2 each year thereafter.

[(e)](b) Each semiannual report shall include the information required by R307-343-6(4), a statement of whether the affected source was in compliance or noncompliance. If the affected source was not in compliance, the measures taken to bring the affected source into compliance shall be reported.

R307-343-10. Compliance Schedule.

(1) All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

(2) New Sources shall submit the following compliance documentation within 60 days of initial startup:

(a) Workplace practice implementation plan as required in R307-343-5(1)(a); and

(b) Initial compliance documentation as required in R307-343-6(3).

KEY: air pollution, ozone, wood furniture[*], coatings[*]
Date of Enactment or Last Substantive Amendment: [June 2, 1999]2006

Notice of Continuation: June 8, 2004

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a); 19-2-104(3)(e)

Environmental Quality, Drinking Water R309-105-9 Minimum Water Pressure

NOTICE OF PROPOSED RULE (Amendment)

DAR FILE NO.: 29036

FILED: 09/15/2006, 16:53

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The reason for the change is to describe additional minimum pressure under conditions of flow for existing Public Water Systems when they expand their system into new service areas or supply new subdivisions after January 1, 2007; and to make the rule more in accordance with typical design standards, as well as standards of other agencies such as the American Water Works Association (AWWA), the American Society of Civil Engineers (ASCE), and other nearby states.

SUMMARY OF THE RULE OR CHANGE: The changes: 1) clarify that the minimum water pressure of 20 psi is during conditions of fire flow added to peak day demand; 2) add a condition of minimum water pressure of 30 psi during peak instantaneous demand; and 3) add a minimum water pressure of 40 psi during peak day demand for existing Public Water Systems extending services into new areas or supplying new subdivisions after January 1, 2007.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-4-104

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: None—Since this amendment only clarifies this portion of rule and the additional water pressure requirements for existing Public Water Systems, it will not require additional personnel or other funds from the state budget.

❖ LOCAL GOVERNMENTS: Little to None—Most, if not all, well functioning Public Water Systems operated by local government currently meet or exceed the current minimum water pressure requirements, as well as the proposed additional minimums. The design of existing Public Water Systems will only require initial planning concerning storage location and distribution pipeline sizing which should not add significant cost or time.

❖ OTHER PERSONS: Little to None—Most engineering companies currently look to typical textbook design standards, as well as standards of other agencies such as AWWA, ASCE, and other nearby states when designing Public Water Systems so there should not be any additional cost or time involved.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Existing Public Water Systems extending service after January 1, 2007, should not see any costs over and above than if their system were designed with the typical capacity for anticipated growth and expansion. Some increased cost may be expected if storage and location for adequate pressure requires additional length of transmission line.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The department agrees that the proposed changes to this rule will have little to no detrimental impact on existing water systems nor on new public water systems. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
DRINKING WATER
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Bill Birkes at the above address, by phone at 801-536-4201, by FAX at 801-536-4211, or by Internet E-mail at bbirkes@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM ON 10/31/2006.

THIS RULE MAY BECOME EFFECTIVE ON: 01/01/2007

AUTHORIZED BY: Kevin Brown, Director

Change to Proposed Rule R307-343

1 **R307. Environmental Quality, Air Quality.**

2 **R307-343. Ozone Nonattainment and Maintenance Areas: Emissions**
3 **Standards for Wood Furniture Manufacturing Operations.**

4 **R307-343-1. Purpose.**

5 [~~(1)~~]The purpose of R307-343 is to limit volatile organic
6 compound (VOC) emissions from wood furniture manufacturing sources
7 located in any ozone nonattainment or maintenance area[s].
8

9 **R307-343-2. Applicability.**

10 Provisions of R307-343 apply to each wood furniture
11 manufacturing source that is not an incidental wood furniture
12 manufacturer, has the potential to emit 25 tons or more per year
13 of [~~volatile organic compounds~~]VOCs and is located in any ozone
14 nonattainment or maintenance area.
15

16 **R307-343-3. Definitions.**

17 The following additional definitions apply to R307-343:

18 "Affected Source" means a wood furniture manufacturing source
19 that meets the criteria in R307-343-2.

20 "Alternate Method" means any method of sampling and analyzing
21 for an air pollutant that is not a reference or equivalent method
22 but that has been demonstrated to the executive secretary's
23 satisfaction to, in specific cases, produce results adequate for a
24 determination of compliance.

25 "As Applied" means the [~~volatile organic compound~~]VOC and
26 solids content of the finishing material that is actually used for
27 coating the substrate. It includes the contribution of materials
28 used for in-house dilution of the finishing material.

29 "Basecoat" means a coat of colored material, usually opaque,
30 that is applied before graining inks, glazing coats, or other
31 opaque finishing materials, and is usually topcoated for
32 protection.

33 "Capture Device" means a hood, enclosed room, floor sweep, or
34 other means of collecting solvent emissions or other pollutants
35 into a duct so that the pollutant can be directed to a pollution
36 control device such as an incinerator or carbon adsorber.

37 "Capture Efficiency" means the fraction of all organic vapors
38 generated by a process that is directed to a control device.

39 "Certified Product Data Sheet__ (CPDS)" means documentation
40 furnished by a coating supplier or an outside laboratory that
41 provides the [~~volatile organic compound~~]VOC content by percent
42 weight, the solids content by percent weight, and the density of a
43 finishing material, strippable booth coating, or solvent, measured
44 using EPA Method 24 or an equivalent or alternate method, or
45 formulation data if the coating meets the criteria specified in
46 R307-343-7(1). The purpose of the CPDS is to assist the affected
47 source in demonstrating compliance with the emission limitations
48 presented in Subsection R307-343-4.

49 "Cleaning Operations" means operations in which organic
50 solvent is used to remove coating materials from equipment used in
51 wood furniture manufacturing operations.

1 "Coating" means a protective, decorative, or functional
2 material applied in a thin layer to a surface. Such materials may
3 include paints, topcoats, varnishes, sealers, stains, washcoats,
4 basecoats, inks, and temporary protective coatings.

5 "Compliant Coating" means a finishing material or strippable
6 booth coating that meets the emission limits specified in R307-
7 343-4(1).

8 "Continuous Coater" means a finishing system that
9 continuously applies finishing materials onto furniture parts
10 moving along a conveyor system. Finishing materials that are not
11 transferred to the part are recycled to the finishing material
12 reservoir. Several types of application methods can be used with
13 a continuous coater including spraying, curtain coating, roll
14 coating, dip coating, and flow coating.

15 "Continuous Compliance" means that the affected source meets
16 the emission limitations and other requirements of R307-343 at all
17 times and fulfills all monitoring and recordkeeping provisions of
18 R307-343 in order to demonstrate compliance.

19 "Control Device" means any equipment that reduces the
20 quantity of a pollutant that is emitted to the air. The device
21 may destroy or secure the pollutant for subsequent recovery.
22 Control devices include, but are not limited to, incinerators,
23 carbon adsorbers, and condensers.

24 "Control Device Efficiency" means the ratio of the pollution
25 released by a control device and the pollution introduced to the
26 control device, expressed as a fraction.

27 "Control System" means the combination of capture and control
28 devices used to reduce emissions to the atmosphere.

29 "Conventional Air Spray" means a spray coating method in
30 which the coating is atomized by mixing it with compressed air at
31 an air pressure greater than 10 pounds per square inch (gauge) at
32 the point of atomization. Airless, air assisted airless spray
33 technologies, and electrostatic spray technology are not
34 considered conventional air spray.

35 "Day" means a period of 24 consecutive hours beginning at
36 midnight local time, or beginning at a time consistent with a
37 source's operating schedule.

38 "Emission" means the direct or indirect release or discharge
39 of ~~[volatile organic compound]~~ VOCs into the ambient air.

40 "Equipment Leak" means emissions of ~~[volatile organic~~
41 ~~compounds]~~ VOCs from pumps, valves, flanges, or other equipment
42 used to transfer or apply finishing materials or organic solvents.

43 "Equivalent Method" means any method of sampling and
44 analyzing for an air pollutant that has been demonstrated to the
45 executive secretary's satisfaction to have a consistent and
46 quantitatively known relationship to the reference method under
47 specific conditions.

48 "Finishing Application Station" means the part of a finishing
49 operation where the finishing material is applied, such as a spray
50 booth.

51 "Finishing Material" means a coating used in the wood

1 furniture industry, including basecoats, stains, washcoats,
2 sealers, and topcoats.

3 "Finishing Operation" means those activities in which a
4 finishing material is applied to a substrate and is subsequently
5 air-dried, cured in an oven, or cured by radiation.

6 "Incidental [~~w~~]Wood [~~f~~]Furniture [~~m~~]Manufacturer" means a
7 major source as defined in 40 CFR 63.2 that is primarily engaged
8 in the manufacture of products other than wood furniture or wood
9 furniture components and that uses no more than 100 gallons per
10 month of finishing material in the manufacture of wood furniture
11 or wood furniture components.

12 "Incinerator" means an enclosed combustion device that
13 thermally oxidizes [~~volatile organic compounds~~]VOCs to carbon
14 monoxide and carbon dioxide. This term does not include devices
15 that burn municipal or hazardous waste material.

16 "Noncompliant Coating" means a finishing material or
17 strippable booth coating that has a [~~volatile organic compound~~]VOC
18 content greater than the emission limitation specified in
19 Subsection R307-343-4(1).

20 "Normally Closed Container" means a container that is closed
21 unless an operator is actively engaged in activities such as
22 emptying or filling the container.

23 "Operating Parameter Value" means a minimum or maximum value
24 established for a control device or process parameter that, if
25 achieved by itself or in combination with one or more other
26 operating parameter values, determines that an owner or operator
27 has complied with an applicable emission limit.

28 "Organic Solvent" means a liquid containing [~~volatile organic~~
29 ~~compounds~~]VOCs that is used for dissolving or dispersing
30 constituents in a coating, adjusting the viscosity of a coating,
31 cleaning, or washoff. When used in a coating, the organic solvent
32 evaporates during drying and does not become a part of the dried
33 film.

34 "Overall Control Efficiency" means the efficiency of a
35 control system, calculated as the product of the capture and
36 control device efficiencies, expressed as a percentage.

37 "Permanent Total Enclosure" means a permanently installed
38 enclosure that completely surrounds a source of emissions such
39 that all emissions are captured and contained for discharge
40 through a control device, and that meets the criteria presented in
41 Subsection R307-343-7(5)(a)(i) through (iv).

42 "Reference Method" means any method of sampling and analyzing
43 for an air pollutant that is published in Appendix A of 40 CFR 60.

44 "Responsible Official" has the same meaning as in R307-415,
45 Operating Permit Requirements.

46 "Sealer" means a finishing material used to seal the pores of
47 a wood substrate before additional coats of finishing material are
48 applied. A washcoat used to optimize aesthetics is not a sealer.

49 "Solids" means the part of the coating that remains after the
50 coating is dried or cured; solids content is determined using data
51 from EPA Method 24, or an alternate or equivalent method approved

1 by the executive secretary.

2 "Solvent" means a liquid used in a coating for dissolving or
3 dispersing constituents in a coating, adjusting the viscosity of a
4 coating, cleaning, or washoff. When used in a coating, it
5 evaporates during drying and does not become a part of the dried
6 film.

7 "Stain" means any color coat having a solids content by
8 weight of no more than 8.0 percent that is applied in single or
9 multiple coats directly to the substrate, including nongrain
10 raising stains, equalizer stains, sap stains, body stains, no-wipe
11 stains, penetrating stains, and toners.

12 "Strippable Booth Coating" means a coating that:

13 (1) is applied to a booth wall to provide a protective film
14 to receive overspray during finishing operations;

15 (2) is subsequently peeled off and disposed; and

16 (3) by achieving (1) and (2), reduces or eliminates the need
17 to use organic solvents to clean booth walls.

18 "Substrate" means the surface onto which coatings are
19 applied, or into which coatings are impregnated.

20 "Temporary Total Enclosure" means an enclosure that meets the
21 requirements of Subsection R307-343-7(5)(a)(i) through (iv) and is
22 not permanent, but is constructed only to measure the capture
23 efficiency of pollutants emitted from a given source.
24 Additionally, any exhaust point from the enclosure shall be at
25 least 4 equivalent duct or hood diameters from each natural draft
26 opening.

27 "Topcoat" means the last film-building finishing material
28 applied in a finishing system. Non-permanent final finishes are
29 not topcoats.

30 "Touch-up and Repair" means the application of finishing
31 materials to cover minor finishing imperfections.

32 "Washcoat" means a transparent special purpose coating having
33 a solids content by weight of 12.0 percent or less that is applied
34 over initial stains to protect and control color and to stiffen
35 the wood fibers in order to aid sanding.

36 "Washoff Operations" means those operations in which organic
37 solvent is used to remove coating from a substrate.

38 "Wood Furniture" means any product made of wood, a wood
39 product such as rattan or wicker, or an engineered wood product
40 such as particleboard that is manufactured under any of the
41 following standard industrial classification codes: 2434, 2511,
42 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

43 "Wood Furniture Manufacturing Operations" means the
44 finishing, cleaning, and washoff operations associated with the
45 production of wood furniture or wood furniture components.

46 "Working Day" means a day, or any part of a day, in which a
47 source is engaged in manufacturing.

48 49 **R307-343-4. Emission Standards.**

50 (1) Each owner or operator of an affected source subject to
51 R307-343 shall limit [~~volatile organic compound~~]VOC emissions from

1 finishing operations. Methods in (a) through (e) below are
2 accepted.

3 (a) Use topcoats with a ~~[volatile organic compound]~~VOC
4 content no greater than 0.8 kilogram per kilogram of solids, as
5 applied; or

6 (b) Use a finishing system of sealers with a ~~[volatile
7 organic compound]~~VOC content no greater than 1.9 kilograms per
8 kilogram of solids, as applied, and topcoats with a ~~[volatile
9 organic compound]~~VOC content no greater than 1.8 kilograms per
10 kilogram of solids, as applied; or

11 (c) For affected sources using acid-cured alkyd amino vinyl
12 sealers or acid-cured alkyd amino conversion varnish topcoats, use
13 sealers and topcoats based on the following criteria:

14 (i) If the affected source is using acid-cured alkyd amino
15 vinyl sealers and acid-cured alkyd amino conversion varnish
16 topcoats, the sealer shall contain no more than 2.3 kilograms of
17 ~~[volatile organic compound]~~VOC per kilogram of solids, as applied,
18 and the topcoat shall contain no more than 2.0 kilograms of
19 ~~[volatile organic compound]~~VOC per kilogram of solids, as applied;

20 (ii) If the affected source is using a sealer other than an
21 acid-cured alkyd amino vinyl sealer and acid-cured alkyd amino
22 conversion varnish topcoats, the sealer shall contain no more than
23 1.9 kilograms of ~~[volatile organic compound]~~VOC per kilogram of
24 solids, as applied, and the topcoat shall contain no more than 2.0
25 kilograms of ~~[volatile organic compound]~~VOC per kilogram of
26 solids, as applied; or

27 (iii) if the affected source is using an acid-cured alkyd
28 amino vinyl sealer and a topcoat other than an acid-cured alkyd
29 amino conversion varnish topcoat, the sealer shall contain no more
30 than 2.3 kilograms of ~~[volatile organic compound]~~VOC per kilogram
31 of solids, as applied, and the topcoat shall contain no more than
32 1.8 kilograms of ~~[volatile organic compound]~~VOC per kilogram of
33 solids, as applied; or

34 (d) Use a control system that will achieve an equivalent
35 reduction in emissions as the requirements of Subsection R307-343-
36 4(1)(a) or (b), as calculated using the compliance provisions in
37 R307-343-6(2), as appropriate; or

38 (e) Use a combination of the methods presented in (a)
39 through (d) above.

40 (2) Each owner or operator of an affected source subject to
41 R307-343 shall limit ~~[volatile organic compound]~~VOC emissions from
42 cleaning operations when using a strippable booth coating. A
43 strippable booth coating shall contain no more than 0.8 kilogram
44 of ~~[volatile organic compound]~~VOC per kilogram of solids, as
45 applied.

46 47 **R307-343-5. Work Practice Standards.**

48 (1) Work Practice Implementation Plan. [

49 ~~—(a)—~~ Each owner or operator of an affected source subject to
50 R307-343 shall prepare and maintain a written work practice
51 implementation plan that defines environmentally desirable work

1 practices for each wood furniture manufacturing operation and
2 addresses each of the topics specified in R307-343-5(2) through
3 (10). The owner or operator of the affected source shall comply
4 with each provision of the work practice implementation plan. The
5 written work practice implementation plan shall be available for
6 inspection by the executive secretary, upon request. If the
7 executive secretary determines that the work practice
8 implementation plan does not adequately address each of the topics
9 specified in (2) through (10) below or that the plan does not
10 include sufficient mechanisms for ensuring that the work practice
11 standards are being implemented, the executive secretary may
12 require the affected source to modify the plan.

13 (2) Operator Training.

14 (a) Each owner or operator of an affected source shall train
15 new and existing personnel, including contract workers, who are
16 involved in finishing, gluing, cleaning, or washoff operations,
17 use of manufacturing equipment, or implementation of the
18 requirements of R307-343. All new personnel, those hired after
19 June 2, 1999, shall be trained upon hiring. All existing
20 personnel, those hired before June 2, 1999, shall be trained by
21 December 4, 1999. All personnel shall be given refresher training
22 annually.

23 (b) The affected source shall maintain a copy of the
24 training program with the work practice implementation plan. The
25 training program shall include, at a minimum, the following:

26 (i) A list of all current personnel by name and job
27 description that are required to be trained;

28 (ii) An outline of the subjects to be covered in the initial
29 and refresher training for each position or group of personnel;

30 (iii) Lesson plans for courses to be given at the initial
31 and the annual refresher training that include, at a minimum,
32 appropriate application techniques, appropriate cleaning and
33 washoff procedures, appropriate equipment setup and adjustment to
34 minimize finishing material usage and overspray, and appropriate
35 management of cleanup wastes; and

36 (iv) A description of the methods to be used at the
37 completion of initial or refresher training to demonstrate and
38 document successful completion and a record of the training date
39 for all personnel.

40 (3) Leak Inspection and Maintenance Plan. Each owner or
41 operator of an affected source shall prepare and maintain with the
42 work practice implementation plan a written leak inspection and
43 maintenance plan that specifies:

44 (a) A minimum visual inspection frequency of once per month
45 for all equipment used to transfer or apply finishing materials,
46 or organic solvents;

47 (b) An inspection schedule;

48 (c) Methods for documenting the date and results of each
49 inspection and any repairs that were made;

50 (d) The time elapsed between identifying the leak and making
51 the repair, using at a minimum the following schedule:

1 (i) A first attempt at repair, such as tightening of packing
2 glands, shall be made no later than five working days after the
3 leak is detected; and

4 (ii) Final repairs shall be made within 15 working days,
5 unless the leaking equipment is to be replaced by a new purchase,
6 in which case repairs shall be completed within three months.

7 (4) Cleaning and Washoff Solvent Accounting System. Each
8 owner or operator of an affected source shall develop an organic
9 solvent accounting form to record:

10 (a) The quantity and type of organic solvent used each month
11 for washoff and cleaning;

12 (b) The number of pieces washed off each month, and the
13 reason for the washoff; and

14 (c) The net quantity of spent organic solvent generated from
15 each washoff and cleaning operation each month, and whether it is
16 recycled onsite or disposed offsite. The net quantity of spent
17 solvent is equivalent to the total amount of organic solvent that
18 is generated from the activity minus any organic solvent that is
19 reused onsite for operations other than cleaning or washoff and
20 any organic solvent that was sent offsite for disposal.

21 (5) Spray Booth Cleaning. Each owner or operator of an
22 affected source shall not use compounds containing more than 8.0
23 percent by weight of ~~[volatile organic compound]~~ VOCs for cleaning
24 spray booth components other than conveyors, continuous coaters
25 and their enclosures, or metal filters, unless the spray booth is
26 being refurbished. If the spray booth is being refurbished, that
27 is, the spray booth coating or other material used to cover the
28 booth is being replaced, the affected source shall use no more
29 than 1.0 gallon of organic solvent to prepare the booth prior to
30 applying the booth coating.

31 (6) Storage Requirements. Each owner or operator of an
32 affected source shall use normally closed containers for storing
33 finishing, cleaning, and washoff materials.

34 (7) Application Equipment Requirements. Each owner or
35 operator of an affected source shall use conventional air spray
36 guns for applying finishing materials only under any of the
37 following circumstances:

38 (a) To apply finishing materials that have a ~~[volatile~~
39 ~~organic compound]~~ VOC content no greater than 1.0 kilogram per
40 kilogram of solids, as applied;

41 (b) For touch-up and repair under the following
42 circumstances:

43 (i) The touchup and repair occurs after completion of the
44 finishing operation; or

45 (ii) The touchup and repair occurs after the application of
46 stain and before the application of any other type of finishing
47 material, and the materials used for touchup and repair are
48 applied from a container that has a volume of no more than 2.0
49 gallons.

50 (c) When the spray gun is aimed and triggered automatically,
51 not manually;

1 (d) When the emissions from the finishing application
2 station are directed to a control device;

3 (e) The conventional air gun is used to apply finishing
4 materials and the cumulative total usage of that finishing
5 material is no more than 5.0 percent of the total gallons of
6 finishing material used during that semiannual reporting period;
7 or

8 (f) The conventional air gun is used to apply stain on a
9 part for which it is technically or economically infeasible to use
10 any other spray application technology. The affected source shall
11 demonstrate technical or economic infeasibility by submitting to
12 the executive secretary a videotape, a technical report, or other
13 documentation that supports the affected source's claim of
14 technical or economic infeasibility. The following criteria shall
15 be used, either independently or in combination, to support the
16 affected source's claim of technical or economic infeasibility:

17 (i) The production speed is too high or the part shape is
18 too complex for one operator to coat the part and the application
19 station is not large enough to accommodate an additional operator;
20 or

21 (ii) The excessively large vertical spray area of the part
22 makes it difficult to avoid sagging or runs in the stain.

23 (8) Line Cleaning. Each owner or operator of an affected
24 source shall pump or drain all organic solvent used for line
25 cleaning into a normally closed container.

26 (9) Gun Cleaning. Each owner or operator of an affected
27 source shall collect all organic solvent used to clean spray guns
28 into a normally closed container.

29 (10) Washoff Operations. Each owner or operator of an
30 affected source shall control emissions from washoff operations by
31 using normally closed tanks for washoff and minimizing dripping by
32 tilting or rotating the part to drain as much organic solvent as
33 possible.
34

35 **R307-343-6. Compliance Procedures and Monitoring Requirements.**

36 (1) Methodology. Terms and equations required in the
37 calculation of compliance are found in Appendix B, "Control of
38 Organic Compound Emissions from Wood Furniture Manufacturing
39 Operations." EPA-453/R-96-007, April 1996. The terms found in
40 B.3(b) on pages B-10 and B-11, Equation 3 on page B-18, Equations
41 4, 5, 6, and 7 on pages B-26 and B-27 are hereby adopted and
42 incorporated by reference. Copies are available at the Division
43 of Air Quality, the Division of Administrative Rules and most
44 state depository libraries.

45 (2) General Compliance. The owner or operator of an
46 affected source subject to the emission standards in Section R307-
47 343-4 shall demonstrate compliance with those provisions by using
48 any of the methods in (a) or (b) below.

49 (a) To demonstrate compliance with emission standards in
50 R307-343-4(1)(a), (b), or (c) or R307-343-4(2), maintain certified
51 product data sheets for each of these finishing materials and

1 strippable booth coatings. If solvent or other [~~volatile organic~~
2 ~~compound~~]VOCs [is]are added to the finishing material before
3 application, the affected source shall maintain documentation
4 showing the [~~volatile organic compound~~]VOC content of the
5 finishing material as applied, in kilograms of [~~volatile organic~~
6 ~~compound~~]VOCs per kilogram of solids.

7 (b) To comply through the use of a control system as
8 specified in R307-343-4(1)(d):

9 (i) Determine the overall control efficiency needed to
10 demonstrate compliance using Equation 3.

11 (ii) Document that the amount of [~~volatile organic~~
12 ~~compound~~]VOCs in Equation 3 is obtained from the [~~volatile organic~~
13 ~~compound~~]VOC and solids content of the finishing material as
14 applied;

15 (iii) Calculate the overall efficiency of the control
16 device, using the procedures in R307-343-7(4) or (5), and
17 demonstrate that the overall efficiency of the control device
18 calculated by Equation 6 is equal to or greater than the overall
19 efficiency of the control device calculated by Equation 3.

20 (3) Initial Compliance. The owner or operator of each
21 affected source shall demonstrate compliance by submitting an
22 initial compliance status report.

23 (a) Each owner or operator of an affected source that
24 complies through the procedures established in (2)(a) above shall
25 submit an initial compliance status report stating that compliant
26 sealers, topcoats and strippable booth coatings are being used by
27 the affected source.

28 (b) Each owner or operator of an affected source that
29 complies by using the procedures in R307-343-6(2)(a) and applies
30 sealers or topcoats using continuous coaters shall:

31 (i) Submit an initial compliance status report stating that
32 compliant sealers or topcoats, as determined by the [~~volatile~~
33 ~~organic compound~~]VOC content of the finishing material in the
34 reservoir and the [~~volatile organic compound~~]VOC content as
35 calculated from records, are used; or

36 (ii) Submit an initial compliance status report stating that
37 compliant sealers or topcoats, as determined by the [~~volatile~~
38 ~~organic compound~~]VOC content of the finishing material in the
39 reservoir, are used and the viscosity of the finishing material in
40 the reservoir is being monitored. The affected source also shall
41 provide data that demonstrates the correlation between the
42 viscosity of the finishing material and the [~~volatile organic~~
43 ~~compound~~]VOC content of the finishing material in the reservoir.

44 (c) Each owner or operator of an affected source using a
45 control system, capture device or control device to comply with
46 the requirements of R307-343, as allowed by R307-343-4(1)(d) and
47 R307-343-6(2)(b), shall:

48 (i) Submit a monitoring plan that identifies the operating
49 parameter to be monitored for the capture device and demonstrates
50 why the parameter is appropriate to show ongoing compliance;

51 (ii) Conduct an initial performance test using the

1 procedures and test methods listed in R307-343-7(3) and (4) or
2 (5);

3 (iii) Calculate the overall control efficiency using
4 Equation 6; and

5 (iv) Determine those operating conditions that are critical
6 to determining compliance and establishing operating parameters
7 that will ensure compliance with the standard, as follows:

8 (A) For a thermal incinerator, use minimum combustion
9 temperature;

10 (B) For a catalytic incinerator equipped with a fixed
11 catalyst bed, use the minimum gas temperature both upstream and
12 downstream of the catalyst bed,

13 (C) For a catalytic incinerator equipped with a fluidized
14 catalyst bed, use the minimum gas temperature upstream of the
15 catalyst bed and the pressure drop across the catalyst bed;

16 (D) For a carbon adsorber, use either the total regeneration
17 mass stream flow for each regeneration cycle and the carbon bed
18 temperature after each regeneration, or the concentration level of
19 organic compounds exiting the adsorber, unless the owner or
20 operator requests and receives approval from the executive
21 secretary to establish other operating parameters;

22 (E) For a control device not listed in (A) through (D)
23 above, the operating parameter shall be established using the
24 procedures in R307-343-6(4)(c)(vi).

25 (v) Each owner or operator complying with R307-343-6(3)(c)
26 shall calculate the site-specific operating parameter value as the
27 arithmetic average of the maximum or minimum operating parameter
28 values, as appropriate, that demonstrate compliance with the
29 standards, during the three test runs required by R307-343-
30 7(3)(a).

31 (d) Each owner or operator of an affected source subject to
32 the work practice standards in R307-343-5 shall submit an initial
33 compliance status report, as required by R307-343-9~~[(2)]~~ (1),
34 stating that the work practice implementation plan has been
35 developed and procedures have been established for implementing
36 the provisions of the plan.

37 (4) Continuous Compliance Demonstrations.

38 (a) Each owner or operator of an affected source subject to
39 the provisions of R307-343-4 that comply using the procedures
40 established in R307-343-6(2)(a) shall demonstrate continuous
41 compliance by using compliant materials, maintaining records that
42 demonstrate the materials are compliant, and submitting a
43 compliance certification with the semiannual report required by
44 R307-343-9~~[(3)]~~ (2).

45 (i) The compliance certification shall state that compliant
46 sealers, topcoats and strippable booth coatings have been used
47 during the semiannual reporting period, or should otherwise
48 identify the days of noncompliance and the reasons for
49 noncompliance.

50 (ii) The compliance certification shall be signed by a
51 responsible official.

1 (b) Each owner or operator of an affected source subject to
2 the provisions of R307-343-4 that comply using the procedures
3 established in R307-343-6(2)(a) and applies sealers or topcoats
4 using continuous coaters shall demonstrate continuous compliance
5 by following the procedures in (i) or (ii) below.

6 (i) Use compliant materials, as determined by the [~~volatile~~
7 ~~organic-compound~~]VOC content of the finishing material in the
8 reservoir and the [~~volatile-organic-compound~~]VOC content as
9 calculated from records, and submit a compliance certification
10 with the semiannual report required by R307-343-9[~~(3)~~](2).

11 (A) The compliance certification shall state that compliant
12 sealers and topcoats have been used during the semiannual
13 reporting period, or should otherwise identify the days of
14 noncompliance and the reasons for noncompliance.

15 (B) The compliance certification shall be signed by a
16 responsible official.

17 (ii) Use compliant materials, as determined by the [~~volatile~~
18 ~~organic-compound~~]VOC content of the finishing material in the
19 reservoir, maintaining a viscosity of the finishing material in
20 the reservoir that is no less than the viscosity of the initial
21 finishing material by monitoring the viscosity with a viscosity
22 meter or by testing the viscosity of the initial finishing
23 material and retesting the material in the reservoir each time
24 solvent is added, maintaining records of solvent additions, and
25 submitting a compliance certification with the semiannual report
26 required by R307-343-9[~~(3)~~](2).

27 (A) The compliance certification shall state that compliant
28 sealers and topcoats, as determined by the [~~volatile-organic~~
29 ~~compound~~]VOC content of the finishing material in the reservoir,
30 have been used during the semiannual reporting period.
31 Additionally, the certification shall state that the viscosity of
32 the finishing material in the reservoir has not been less than the
33 viscosity of the initial finishing material, that is, the material
34 that is initially mixed and placed in the reservoir, during the
35 semiannual reporting period.

36 (B) The compliance certification shall be signed by a
37 responsible official.

38 (C) An affected source is in violation of the standard when
39 a sample of the finishing material as applied exceeds the
40 applicable limit established in R307-343-4(1)(a), (b), or (c), as
41 determined using EPA Method 24 or an alternate or equivalent
42 method, or the viscosity of the finishing material in the
43 reservoir is less than the viscosity of the initial finishing
44 material.

45 (c) Each owner or operator of an affected source subject to
46 the provisions of R307-343-4 that complies using a control system,
47 capture device or control device shall demonstrate continuous
48 compliance by installing, calibrating, maintaining, and operating
49 the appropriate monitoring equipment according to manufacturer's
50 specifications.

51 (i) Where a capture or control device is used, a device to

1 monitor the site-specific operating parameter established in
2 accordance with R307-343-6(3)(c)(i) is required.

3 (ii) Where an incinerator is used, a temperature monitoring
4 device equipped with a continuous recorder is required.

5 (A) Where a thermal incinerator is used, a temperature
6 monitoring device shall be installed in the firebox or in the
7 ductwork immediately downstream of the firebox in a position
8 before any substantial heat exchange occurs.

9 (B) Where a catalytic incinerator equipped with a fixed
10 catalyst bed is used, temperature monitoring devices shall be
11 installed in the gas stream immediately before and after the
12 catalyst bed.

13 (C) Where a catalytic incinerator equipped with a fluidized
14 catalyst bed is used, a temperature monitoring device shall be
15 installed in the gas stream immediately before the bed. In
16 addition, a pressure monitoring device shall be installed to
17 determine the pressure drop across the catalyst bed. The pressure
18 drop shall be measured monthly at a constant flow rate.

19 (iii) Where a carbon adsorber is used, one of the following
20 monitoring devices shall be used:

21 (A) An integrating regeneration stream flow monitoring
22 device having an accuracy of plus or minus 10 percent, capable of
23 recording the total regeneration stream mass flow for each
24 regeneration cycle; and a carbon bed temperature monitoring device
25 having an accuracy of plus or minus one percent of the temperature
26 being monitored expressed in degrees Celsius, or plus or minus 0.5
27 C, whichever is greater, capable of recording the carbon bed
28 temperature after each regeneration and within fifteen minutes of
29 completing any cooling cycle;

30 (B) An organic monitoring device, equipped with a continuous
31 recorder, to indicate the concentration level of organic compounds
32 exiting the carbon adsorber; or

33 (C) Any other monitoring device that has been approved by
34 the executive secretary as allowed under (vi) below.

35 (iv) Each owner or operator of an affected source shall not
36 operate the capture or control device at a daily average value
37 greater than or less than the operating parameter value, as
38 defined in the plan required by R307-343-6(3)(c)(i). The daily
39 average value shall be calculated as the average of all values for
40 a monitored parameter recorded during the operating day.

41 (v) Each owner or operator of an affected source that
42 complies through the use of a catalytic incinerator equipped with
43 a fluidized catalyst bed shall maintain a constant pressure drop,
44 measured monthly, across the catalyst bed.

45 (vi) An owner or operator using a control device not listed
46 in R307-343-6(3)(c) shall submit to the executive secretary a
47 description of the device, test data verifying the performance of
48 the device, and appropriate operating parameter values that will
49 be monitored to demonstrate continuous compliance with the
50 standard. Use of this device to demonstrate compliance is subject
51 to the executive secretary's approval.

(vii) The owner or operator shall submit a compliance certification with the semiannual report required by R307-343-9(3).

(B) The compliance certification shall be signed by a responsible official.

(i) The compliance certification shall state that the work practice implementation plan was followed, or should otherwise identify the periods of noncompliance with the work practice standards.

R307-343-7. Performance Test Methods.

Method 24 (40 CFR 60) shall be used to determine the [~~volatile organic compound~~]VOC content and the solids content by weight of the finishing materials as supplied by the manufacturer. The owner or operator of the affected source may request approval from the executive secretary to use an alternate or equivalent method for determining the [~~volatile organic compound~~]VOC content of the finishing material. Batch formulation information may be accepted by the executive secretary if the source demonstrates that a finishing material does not release [~~volatile organic compound~~]VOC reaction byproducts during the cure. If the EPA Method 24 value is higher than the source's formulation data, the EPA Method 24 test shall govern. Sampling procedures shall follow the guidelines in "Standard Procedures for Collection of Coating and Ink Samples for [~~volatile organic compound~~]VOC Content Analysis by Reference Method 24 and Reference Method 24A," EPA-340/1-91-010.

(3) Each owner or operator using a control system shall demonstrate initial compliance using the procedures in (a) through (f) below.

1 streams. The test shall consist of three separate runs, each
2 lasting a minimum of 30 minutes.

3 (b) The EPA Method 1 or 1A shall be used for sample and
4 velocity traverses.

5 (c) The EPA Method 2, 2A, 2C, or 2D shall be used to measure
6 velocity and volumetric flow rates.

7 (d) The EPA Method 3 shall be used to analyze the exhaust
8 gases.

9 (e) The EPA Method 4 shall be used to measure the moisture
10 in the stack gas.

11 (f) The EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be
12 performed, as applicable, at least twice during each test period.

13 (4) Each owner or operator using a control system to
14 demonstrate compliance with R307-343 shall use the procedures in
15 (a) through (f) below.

16 (a) Construct the overall [~~volatile organic compound~~]VOC
17 control system so that volumetric flow rates and [~~volatile organic~~
18 ~~compound~~]VOC concentrations can be determined by the test methods
19 specified in R307-343-7(3);

20 (b) Measure the capture efficiency from the affected
21 emission points by capturing, venting, and measuring all [~~volatile~~
22 ~~organic compound~~]VOC emissions from the affected emission points.

23 To measure the capture efficiency of a capture device located in
24 an area with nonaffected [~~volatile organic compound~~]VOC emission
25 points, the affected emission points shall be isolated from all
26 other [~~volatile organic compound~~]VOC sources by one of the
27 following methods:

28 (i) Build a temporary total enclosure around the affected
29 emission points;

30 (ii) Shut down all nonaffected [~~volatile organic~~
31 ~~compound~~]VOC emission points and continue to exhaust fugitive
32 emissions from the affected emission points through any building
33 ventilation system and other room exhausts such as drying ovens.
34 All exhaust air must be vented through stacks suitable for
35 testing; or

36 (iii) Use another methodology approved by the executive
37 secretary provided it complies with the EPA criteria for
38 acceptance under 40 CFR Part 63, Appendix A, Method 301.

39 (c) Operate the control system with all affected emission
40 points connected and operating at maximum production rate;

41 (d) Determine the efficiency of the control device using
42 Equation 4;

43 (e) Determine the efficiency of the capture system using
44 Equation 5;

45 (f) Compliance is demonstrated if the overall control
46 efficiency in Equation 6 is greater than or equal to the overall
47 control efficiency calculated by Equation 3, in accordance with
48 R307-343-6(2)(b)(i).

49 (5) An alternate to the compliance method presented in (4)
50 above is the installation of a permanent total enclosure.

51 (a) Each affected source that complies using a permanent

1 total enclosure shall demonstrate that the total enclosure meets
2 the following requirements:

3 (i) The total area of all natural draft openings shall not
4 exceed five percent of the total surface area of the enclosure's
5 walls, floor, and ceiling;

6 (ii) All sources of emissions within the enclosure shall be
7 a minimum of four equivalent diameters away from each natural
8 draft opening;

9 (iii) Average inward face velocity (FV) across all natural
10 draft openings shall be a minimum of 3,600 meters per hour or 200
11 feet per minute as determined by the following procedures:

12 (A) All forced makeup air ducts and all exhaust ducts are
13 constructed so that the volumetric flow rate in each can be
14 accurately determined by the test methods and procedures specified
15 in (3)(b) and (3)(c) above. Volumetric flow rates shall be
16 calculated without the adjustment normally made for moisture
17 content; and

18 (B) Determine face velocity by Equation 7:

19 (iv) All access doors and windows whose areas are not
20 included as natural draft openings and are not included in the
21 calculation of face velocity shall be closed during routine
22 operation of the process.

23 (b) Determine the control device efficiency using Equation
24 4, and the test methods and procedures specified in R307-343-7(3).

25 (c) For a permanent total enclosure, the capture efficiency
26 in Equation 5 is equal to one.

27 (d) For owners or operators using a control system to comply
28 with the provisions of R307-343, compliance is demonstrated if:

29 (i) The capture efficiency of the enclosure is determined to
30 equal one; and

31 (ii) The overall efficiency of the control system calculated
32 by Equation 6 in accordance with (4) above is greater than or
33 equal to the overall efficiency of the control system calculated
34 by Equation 3 in accordance with R307-343-6(2)(b).

35 36 **R307-343-8. Recordkeeping Requirements.**

37 (1) The owner or operator of an affected source subject to
38 the emission limits in R307-343-4 shall maintain records of the
39 following:

40 (a) A certified product data sheet for each finishing
41 material and strippable booth coating subject to the emission
42 limits in R307-343-4;

43 (b) The ~~[volatile organic compound]~~VOC content, kilograms of
44 ~~[volatile organic compound]~~VOCs per kilogram of solids, as
45 applied, of each finishing material and strippable booth coating
46 subject to the emission limits in R307-343-4, and copies of data
47 sheets documenting how the as applied values were determined.

48 (2) The owner or operator of an affected source following
49 the compliance procedures of R307-343-6(4)(b) shall maintain the
50 records required by (1) above and records of solvent and finishing
51 material additions to the continuous coater reservoir and

1 viscosity measurements.

2 (3) The owner or operator of an affected source following
3 the compliance method of R307-343-6(2)(b) shall maintain the
4 following records:

5 (a) Copies of the calculations to demonstrate that the
6 control system achieves emission control equivalent to the
7 requirements of R307-343-4(1)(a) or (b), as well as the data that
8 are necessary to support the calculation of the emission limit in
9 Equation 3 and the calculation of overall control efficiency in
10 Equation 6;

11 (b) Records of the daily average value of each continuously
12 monitored parameter for each operating day. If all recorded
13 values for a monitored parameter are within the range established
14 during the initial performance test, the owner or operator may
15 record that all values were within the range rather than
16 calculating and recording an average for that day; and

17 (c) Records of the pressure drop across the catalyst bed for
18 sources complying with the emission limitations using a catalytic
19 incinerator with a fluidized catalyst bed.

20 (4) The owner or operator of an affected source subject to
21 the work practice standards in R307-343-5 shall maintain onsite
22 the work practice implementation plan and all records associated
23 with fulfilling the requirements of that plan, including:

24 (a) Records demonstrating that the operator training program
25 is in place;

26 (b) Records maintained in accordance with the inspection and
27 maintenance plan;

28 (c) Records associated with the cleaning solvent accounting
29 system;

30 (d) Records associated with the limitation on the use of
31 conventional air spray guns showing total finishing material usage
32 and the percentage of finishing materials applied with
33 conventional air spray guns for each semiannual reporting period;

34 (e) Records showing the [~~volatile organic compound~~]VOC
35 content of compounds used for cleaning booth components, except
36 for solvent used to clean conveyors, continuous coaters and their
37 enclosures, or metal filters; and

38 (f) Copies of logs and other documentation to demonstrate
39 that the other provisions of the work practice implementation plan
40 are followed.

41 (5) In addition to the records required by R307-343-8(1) of
42 this section, the owner or operator of an affected source that
43 complies using the provisions of R307-343-6(2)(a) or R307-343-5
44 shall maintain a copy of the compliance certifications submitted
45 in accordance with R307-343-9[~~(3)~~](2) for each semiannual period
46 following the compliance date.

47 (6) The owner or operator of an affected source shall
48 maintain a copy of all other information submitted with the
49 initial status report required by R307-343-9[~~(2)~~](1) and the
50 semiannual reports required by R307-343-9[~~(3)~~](2).

51 (7) The owner or operator of an affected source shall

maintain all records for a minimum of five years.

R307-343-9. Reporting Requirements.

(1) ~~[The owner or operator of an affected source using a control system to fulfill the requirements R307-343 is subject to R307-214 2(1) in which the reporting requirements of 40 CFR Part 63, subpart A are incorporated by reference.]~~ The owner or operator of any new source subject to R307-343 that complies using the procedures established in R307-343-6(2)(a) shall submit an initial compliance report within 60 days of initial startup. The owner or operator of a new source subject to R307-343 that complies using the procedures established in R307-343-6(2)(b) shall submit an initial compliance report within 180 days of initial startup. Each initial compliance report shall include the items required by R307-343-6(3).

(2) The owner or operator of an affected source subject to R307-343 and demonstrating compliance in accordance with R307-343-6(2)(a) or (b) shall submit a semiannual report covering the previous six months of wood furniture manufacturing operations.

(a) Reports shall be submitted on January 2 and July 2 each year.

(b) Each semiannual report shall include the information required by R307-343-6(4), a statement of whether the affected source was in compliance or noncompliance. If the affected source was not in compliance, the measures taken to bring the affected source into compliance shall be reported.

R307-343-10. Compliance Schedule.

~~[(1)]~~ All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.

~~(2) New sources shall submit the following compliance documentation within 60 days of initial startup:~~

~~(a) Workplace practice implementation plan as required in R307-343-5(1)(a); and~~

~~(b) Initial compliance documentation as required in R307-343-6(3).~~

KEY: air pollution, ozone, wood furniture, coatings

Date of Enactment or Last Substantive Amendment: [2006]2007

Notice of Continuation: June 8, 2004

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a); 19-2-104(3)(e)



State of Utah

Department of
Environmental Quality

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Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

MEMORANDUM

TO: Air Quality Board

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Robert Clark, Environmental Scientist

DATE: January 3, 2007

SUBJECT: Final Action: Delete R307-332, Stage II Vapor Recovery Systems

On September 6, 2006, the Board proposed to delete R307-332, Stage II Vapor Recovery Systems. A 30-day public comment period was held, and a public hearing was conducted on October 17, 2006. No comments related to this rule were received either at the public hearing or during the public comment period.

Recommendation: Staff recommends that R307-332 be deleted.

1 **R307. Environmental Quality, Air Quality.[**

2 ~~**R307-332. Davis and Salt Lake Counties and Ozone Nonattainment**~~
3 ~~**Areas: Stage II Vapor Recovery Systems.**~~

4 ~~**R307-332-1. Definitions.**~~

5 ~~_____The following additional definitions apply to R307-332:~~

6 ~~_____ "Control" of a corporation means ownership of more than 50%~~
7 ~~of its stock.~~

8 ~~_____ "Dispense" means to transfer or allow the transfer of~~
9 ~~gasoline from a stationary gasoline tank into a motor vehicle fuel~~
10 ~~_____ tank.~~

11 ~~_____ "Effective" means the percent recovery of gasoline vapors~~
12 ~~emitted during dispensing of gasoline into motor vehicle fuel~~
13 ~~_____ tanks.~~

14 ~~_____ "Installation" means a public, private, or government owned~~
15 ~~or operated establishment that dispenses gasoline at a single~~
16 ~~location and is subject to R307-332.~~

17 ~~_____ "Independent small business marketer of gasoline" means a~~
18 ~~person engaged in the retail dispensing and marketing of gasoline~~
19 ~~unless such person:~~

20 ~~_____ (1) is a refiner, whose total refinery capacity (including~~
21 ~~the refinery capacity of any person who controls, is controlled~~
22 ~~by, or is under common control with such refiner) exceeds 65,000~~
23 ~~barrels per day;~~

24 ~~_____ (2) controls, is controlled by, or is under common control~~
25 ~~with such a refiner; or~~

26 ~~_____ (3) is otherwise directly or indirectly affiliated with such~~
27 ~~a refiner or with a person who controls, is controlled by, or is~~
28 ~~under a common control with such a refiner (unless the sole~~
29 ~~affiliation referred to herein is by means of a supply contract or~~
30 ~~an agreement or contract to use a trademark, trade name, service~~
31 ~~mark, or other identifying symbol or name owned by such refiner or~~
32 ~~any such person), or~~

33 ~~_____ (4) receives less than 50% of his annual income from~~
34 ~~refining or marketing of gasoline.~~

35 ~~_____ "Stage II trigger date" means the date on which is triggered~~
36 ~~the Contingency Action Level specified in Section IX.D.2.h(2) of~~
37 ~~the State Implementation Plan.~~

38 ~~_____ "Stage II vapor recovery system" means a system that meets~~
39 ~~the requirements of R307-332-2.~~

40
41 ~~**R307-332-2. Specifications and Approval.**~~

42 ~~_____ (1) For a Stage II vapor recovery system to be used in Utah~~
43 ~~to comply with this rule the manufacturer or vendor of the system~~
44 ~~shall submit to the executive secretary documentation that its~~
45 ~~Stage II vapor recovery system is capable of recovering 95% of~~
46 ~~gasoline vapor emissions resulting from dispensing gasoline into~~
47 ~~the motor vehicle fuel tanks. Minimum documentation consists of~~
48 ~~the California Air Resources Board (CARB) Executive Order~~
49 ~~pertaining to the Stage II vapor recovery system in question,~~
50 ~~including all attachments and exhibits or the findings of a~~
51 ~~testing program that the executive secretary and EPA determines to~~
52 ~~be equivalent to a California Air Resources Board Stage II vapor~~

1 ~~recovery equipment certification.~~

2 ~~— (2) The executive secretary shall review the submitted~~
3 ~~documentation and certify his approval or disapprove use of the~~
4 ~~system for compliance with R307-332.~~

5 ~~— (3) Only Stage II vapor recovery systems approved by the~~
6 ~~executive secretary may be used to comply with this rule.~~

7
8 **~~R307-332-3. Applicability.~~**

9 ~~— (1) R307-332 applies to installations:~~

10 ~~— (a) located in Salt Lake County or Davis County and~~

11 ~~— (b) which dispense more than 10,000 gallons of gasoline per~~
12 ~~month or, in the case of an independent small business marketer of~~
13 ~~gasoline, which dispense more than 50,000 gallons of gasoline per~~
14 ~~month; or~~

15 ~~— (c) have ever met the conditions of (a) and (b) above.~~

16 ~~— (2) Installations located in Salt Lake County or Davis~~
17 ~~County and which dispense 10,000 gallons or less of gasoline per~~
18 ~~month, or in the case of an independent small business marketer of~~
19 ~~gasoline, which dispense 50,000 gallons or less of gasoline per~~
20 ~~month are exempt from all the requirements of R307-332 except~~
21 ~~R307-332-4(6) and R307-332-8(4).~~

22
23 **~~R307-332-4. Compliance Schedule.~~**

24 ~~— (1) No person shall dispense gasoline from an installation~~
25 ~~for which R307-332 is applicable except by means of a Stage II~~
26 ~~vapor recovery system after the dates specified in this~~
27 ~~subsection.~~

28 ~~— (2) The owners or operators of all installations at which~~
29 ~~construction or gasoline tank replacement commenced after the~~
30 ~~Stage II trigger date are required to install and operate a Stage~~
31 ~~II vapor recovery system before dispensing any gasoline.~~

32 ~~— (3) Compliance Date.~~

33 ~~— (a) Owners or operators of all installations existing before~~
34 ~~the Stage II trigger date, except independent small business~~
35 ~~marketers of gasoline, are required to install and operate a Stage~~
36 ~~II vapor recovery system no later than:~~

37 ~~— (i) May 1 of the year after the Stage II trigger date, in~~
38 ~~the case of installations which dispense 100,000 or more gallons~~
39 ~~of gasoline per month or for which construction commenced after~~
40 ~~November 15, 1990 and before the Stage II trigger date or~~

41 ~~— (ii) May 1 of the year two years after the year in which the~~
42 ~~Stage II trigger date occurred, in the case of installations which~~
43 ~~dispense 10,001 to 99,999 gallons of gasoline per month.~~

44 ~~— (b) Any installation described by more than one clause of~~
45 ~~(2)(a) shall meet the earliest applicable compliance date.~~

46 ~~— (4) In the case of installations existing before the Stage~~
47 ~~II trigger date for which R307-332 is applicable on the Stage II~~
48 ~~trigger date, and which are owned by an independent small business~~
49 ~~marketer of gasoline, which dispense 50,000 or more gallons per~~
50 ~~month, a three year phase in period for the installation and~~
51 ~~operation of Stage II vapor recovery systems at installations~~
52 ~~owned by that marketer shall be as follows:~~

1 ~~_____ (a) 33% of such installations in compliance no later than~~
2 ~~May 1 of the year after the Stage II trigger date;~~

3 ~~_____ (b) 66% of such installations in compliance no later than~~
4 ~~May 1 of the year two years after the year in which the Stage II~~
5 ~~trigger date occurred; and~~

6 ~~_____ (c) 100% of such installations in compliance no later than~~
7 ~~May 1 of the year three years after the year in which the Stage II~~
8 ~~trigger date occurred.~~

9 ~~_____ (5) Installations existing before the Stage II trigger date,~~
10 ~~which met the exemption provisions of R307 332 3(2) and which~~
11 ~~dispense more than 10,000 gallons of gasoline per month or, in the~~
12 ~~case of an independent small business marketer of gasoline which~~
13 ~~dispense more than 50,000 gallons of gasoline per month, are~~
14 ~~required to install and operate a Stage II vapor recovery system~~
15 ~~no later than six months after the end of the month for which the~~
16 ~~gallons of gasoline dispensed or sold by the installation exceeds~~
17 ~~the number of gallons per month specified in this subsection.~~

18 ~~_____ (6) Initially the volume of gasoline sold or dispensed per~~
19 ~~month for purposes of compliance with R307 332 shall be determined~~
20 ~~by the average volume dispensed or sold per month over the twenty-~~
21 ~~four month period immediately preceding the Stage II trigger date.~~
22 ~~Thereafter, the volume of gasoline sold per month for purposes of~~
23 ~~compliance with R307 332 shall be determined by a rolling twenty-~~
24 ~~four month average of the volume dispensed or sold per month. If~~
25 ~~an installation was inactive for any period during the twenty four~~
26 ~~month calculation period, the period shall be extended to include~~
27 ~~a total of twenty four months of activity. If an installation has~~
28 ~~not operated a total of twenty four months, the average shall be~~
29 ~~of the portion for which the installation was active. Within 90~~
30 ~~days after the Stage II trigger date and by February 1 of every~~
31 ~~year thereafter, owners or operators of installations shall submit~~
32 ~~the following information to the executive secretary on forms~~
33 ~~provided by the executive secretary:~~

34 ~~_____ (a) the name and address of the installation owner;~~

35 ~~_____ (b) the name and address of the installation;~~

36 ~~_____ (c) the number of nozzles and pumps at the installation;~~

37 ~~_____ (d) the California Air Resources Board Executive Order~~
38 ~~Number or identification of non California Air Resources Board~~
39 ~~certification approved by the executive secretary of any Stage II~~
40 ~~vapor recovery systems or portions of systems already installed;~~

41 ~~_____ (e) a compliance schedule, if applicable; and~~

42 ~~_____ (f) (i) in the case of the submittal due 90 days after the~~
43 ~~Stage II trigger date, the installation's monthly and annual~~
44 ~~gasoline throughput for twenty four months of active operation~~
45 ~~immediately preceding the Stage II trigger date or~~

46 ~~_____ (ii) in the case of the submittal due on February 1 of every~~
47 ~~year thereafter, the gasoline throughput for each month of the~~
48 ~~previous calendar year.~~

49
50 **~~R307-332-5. Installation.~~**

51 ~~_____ (1) Owners or operators of installations are required to~~
52 ~~submit, to the executive secretary, Stage II vapor recovery system~~

1 ~~installation specifications no later than thirty days prior to~~
2 ~~installation. The submittal shall include the following~~
3 ~~information:~~

4 ~~— (a) the name, address, and phone number of the installation~~
5 ~~owner;~~

6 ~~— (b) the name, address, and phone number of the installation;~~

7 ~~— (c) number of gasoline nozzles and pumps at the~~
8 ~~installation;~~

9 ~~— (d) the California Air Resources Board Executive Order~~
10 ~~Number or identification of non California Air Resources Board~~
11 ~~certification approved by the executive secretary of the Stage II~~
12 ~~vapor recovery system to be installed;~~

13 ~~— (e) the certification number issued by the executive~~
14 ~~secretary to the manufacturer or vendor of the Stage II vapor~~
15 ~~recovery system to be installed to verify approval of the system~~
16 ~~for use to comply with this rule;~~

17 ~~— (f) a site plan of all tanks, dispensers, and underground~~
18 ~~pipng; and~~

19 ~~— (g) the date or dates on which construction and installation~~
20 ~~of the Stage II vapor recovery system is expected to occur.~~

21 ~~— (2) Stage II vapor recovery systems shall be installed in~~
22 ~~accordance with manufacturer specifications and the submittal~~
23 ~~described in (1) above.~~

24 ~~— (3) The installation owner must verify that the Stage II~~
25 ~~vapor recovery system installed at least meets the requirements of~~
26 ~~the following tests for which specifications may be obtained from~~
27 ~~the executive secretary:~~

28 ~~— (a) AQB Leak Test Procedure (after "Bay Area ST 30 Leak Test~~
29 ~~Procedure") or AQB Pressure Decay/Leak Test (after "San Diego Test~~
30 ~~Procedure TP 92 1 Pressure Decay/Leak Test Procedure"); and~~

31 ~~— (b) AQB Pressure Drop vs Flow/Liquid Blockage Test Procedure~~
32 ~~(after "San Diego Test Procedure TP 91 2 Pressure Drop vs~~
33 ~~Flow/Liquid Blockage Test Procedure").~~

34 ~~— (4) The executive secretary may approve alternatives to the~~
35 ~~tests specified in (3) above, if requested by the owner or~~
36 ~~operator and approved by EPA.~~

37 ~~— (5) The tests specified in (3) and (4) above shall be~~
38 ~~performed after notifying the executive secretary as specified in~~
39 ~~R307 332 11. The test results must be dated and include the name,~~
40 ~~address, and phone number of the person that performed the tests.~~
41 ~~Initial testing shall be conducted after the above ground~~
42 ~~equipment is installed, and must be completed in time to meet the~~
43 ~~compliance schedule specified in R307 332 4. Testing shall be~~
44 ~~conducted at the gasoline dispensing pumps.~~

45 ~~— (6) A copy of the results of tests conducted in accordance~~
46 ~~with (3) above shall be maintained on the premises of the~~
47 ~~installation.~~

48
49 **~~R307-332-6. Installation Owner/Operator and Employee Training.~~**

50 ~~— (1) Owners or operators of installations shall provide every~~
51 ~~installation employee, including the operator[,] that is~~
52 ~~responsible for the use, operation, or maintenance of a Stage II~~

1 vapor recovery system with training on the purpose, effects, and
2 operation of the installation's Stage II vapor recovery system as
3 specified by the system manufacturer.

4 ~~(2) Owners or operators of installations shall provide at~~
5 ~~least one employee that is responsible for the maintenance of a~~
6 ~~Stage II vapor recovery system with training specified in (1)~~
7 ~~above and on the maintenance schedules and requirements,~~
8 ~~manufacturer contacts for parts and service, and warranty~~
9 ~~provisions of the installation's Stage II vapor recovery system as~~
10 ~~specified by the system manufacturer.~~

11 ~~(3) No installation operator or employee may operate or be~~
12 ~~responsible for the operation of a Stage II vapor recovery system~~
13 ~~prior to completion of the training specified in (1) above.~~

14 ~~(4) No installation operator or employee may repair,~~
15 ~~authorize or supervise repair, or perform, authorize, or supervise~~
16 ~~maintenance of a Stage II vapor recovery system prior to~~
17 ~~completion of the training specified in (2) above.~~

18 ~~(5) Proof of the training specified in (1) above shall be~~
19 ~~maintained on the installation premises for each installation~~
20 ~~operator and employee for which such training is required.~~

21 ~~(6) Proof of the training specified in (2) above shall be~~
22 ~~maintained for each installation operator and employee for which~~
23 ~~such training is required.~~

24 ~~(7) Records of training specified in R307-332-6 will be made~~
25 ~~available to representatives of the executive secretary upon~~
26 ~~request.~~

27 28 **~~R307-332-7. Operation and Maintenance.~~**

29 ~~(1) A copy of the operating and maintenance documentation~~
30 ~~provided by the Stage II vapor recovery system manufacturer shall~~
31 ~~be maintained at the installation and be available to installation~~
32 ~~employees.~~

33 ~~(2) The system shall be operated and maintained in~~
34 ~~accordance with operating and maintenance documentation provided~~
35 ~~by the Stage II vapor recovery system manufacturer.~~

36 ~~(3) Modification or repair of Stage II vapor recovery~~
37 ~~systems shall be conducted in accordance with manufacturer~~
38 ~~specifications and using parts approved by California Air~~
39 ~~Resources Board or the executive secretary.~~

40 ~~(4) The owner or operator of a Stage II vapor recovery~~
41 ~~system shall upgrade the system to comply with any modification of~~
42 ~~the California Air Resources Board executive order for the system~~
43 ~~no later than six months after the California Air Resources Board~~
44 ~~executive order for the system is modified.~~

45 ~~(5) The owner or operator of the Stage II vapor recovery~~
46 ~~system shall maintain a record of all maintenance and repairs for~~
47 ~~the system. The record shall include a general description of any~~
48 ~~parts replaced or repaired, the date of the repair or replacement,~~
49 ~~the manufacturer and part number of any part replaced, a general~~
50 ~~description of the part location in the system, and a description~~
51 ~~of the problem.~~

52

~~R307-332-8. Records.~~

~~Owners or operators of installations shall maintain up to date copies of:~~

~~(1) Stage II vapor recovery system installation, testing documentation, and maintenance records as long as the system is in place;~~

~~(2) Stage II vapor recovery system inspection and compliance reports and records filed in chronological order for the preceding two years;~~

~~(3) records of current employee Stage II vapor recovery system training; and~~

~~(4) records of the volume of gasoline delivered and dispensed each month of the preceding twenty four month period.~~

~~R307-332-9. Pump Labeling Requirements.~~

~~(1) The owner or operator of any installation that dispenses gasoline by means of a Stage II vapor recovery system is required to label pumps as follows.~~

~~(a) The label letters shall be in block letters of no less than 20 point type, at least 1/16 inch stroke (width of type), and of a color that contrasts with the label background color.~~

~~(b) The label shall affixed to the front upper half of the vertical surface of the gasoline pump on each side with gallonage and dollar amount meters from which gasoline can be dispensed and shall be clearly readable to the pump user.~~

~~(c) Information on the label shall include:~~

~~(i) a general explanation of how the Stage II vapor recovery system works and how it should be operated;~~

~~(ii) notice that the user should not attempt to overfill the motor vehicle gas tank;~~

~~(iii) notice that the purpose of Stage II vapor recovery systems is to minimize gasoline emissions from motor vehicle refueling; and~~

~~(iv) the name and telephone number of the Division of Air Quality.~~

~~R307-332-10. Self Inspections.~~

~~(1) The owner or operator of an installation shall ensure that the following tests and inspections are performed as specified.~~

~~(a) After notification as specified in R307-332-11, one of the tests specified in R307-332-5(3)(a) or another test or tests approved by the executive secretary and EPA, shall be conducted for every Stage II vapor recovery system at each installation every third year after the initial test required by R307-332-5(3)(a) or at any installation that the executive secretary has any indication that leaks may exist.~~

~~(b) After notification as specified in R307-332-11, the test specified in R307-332-5(3)(b), the AQB Dynamic Back Pressure Test, or another test or tests approved by the executive secretary and EPA, shall be conducted for every Stage II vapor recovery system at each installation every fourth year after the initial test~~

1 required by R307-332 5(3)(b) or at any installation that the
2 executive secretary has any indication that a blockage may exist.

3 (c) After notification as specified in R307-332 11, a
4 functional test shall be conducted every year on any and all auto
5 shut off mechanisms and flow prohibiting mechanisms on all
6 dispensing nozzles to determine if the mechanisms are functional.

7 (d) Visual inspections shall be conducted at a frequency
8 sufficient to ensure:

9 (i) that all the Stage II vapor recovery equipment is
10 present, is maintained in the certified configuration, and is in
11 proper working order, including, but not limited to: nozzles and
12 nozzle parts (facecone, bellows, springs, latches, check valves),
13 hoses and hose hanger/retractors, flow limiters, swivels,
14 collection units, control panels, system pumps, processing units,
15 vent pipes and any and all other system related parts;

16 (ii) compliance with all Stage II vapor recovery system
17 label requirements as specified in R307-332 9; and

18 (iii) that all Stage II vapor recovery system equipment is
19 being operated properly, including dispensing units, processors,
20 handling units, and any other system related equipment.

21 (2) Stage II vapor recovery systems or portions of Stage II
22 vapor recovery systems found to be malfunctioning shall be taken
23 out of service until repaired.

24 25 **R307-332-11. Test Notification Requirements.**

26 (1) The owner or operator of an installation shall notify
27 the executive secretary in writing at least thirty days before
28 conducting a test to comply with R307-332 5(3) or (4), or R307-
29 332 10(1)(a), (b) or (c).

30 (2) The notification required in (1) above shall include:

31 (a) the name, address, and phone number of the installation;

32 (b) the name of the test;

33 (c) the name and telephone number of the person that will
34 conduct the test; and

35 (d) the time and date on which the test shall be conducted.

36 (3) If the results of a test listed in (1) above do not show
37 compliance with standards specified in the appropriate test
38 specification, the owner or operator of an installation shall
39 notify the executive secretary by five P.M. on the first working
40 day after the test. Notification shall include the name, address,
41 and phone number of the installation and the name of the test.

42
43 **KEY: air pollution, motor vehicles, gasoline, ozone**

44 **Date of Enactment or Last Substantive Amendment: September 15,**
45 **1998**

46 **Notice of Continuation: August 5, 2003**

47 **Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-**
48 **104]**

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BEFORE THE UTAH AIR QUALITY BOARD

In the Matter of: Sevier Power Company Power Plant Sevier County, Utah DAQE-AN2529001-04	PROPOSED SCHEDULING ORDER
-------------------------------------------------------------------------------------------------------	---------------------------

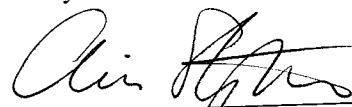
COMES NOW the Executive Secretary of the Utah Division of Air Quality ("UDAQ"), through undersigned counsel, and hereby submits the following proposed scheduling order in the above-captioned matter.

ACTION	PROPOSED DATE
Responses to outstanding petitions to intervene and requests for agency action	Prior to January 3, 2007 board meeting
Hearing and decision of Air Quality Board about potential intervening parties	January 3, 2007 board meeting
Discovery begins	January 3, 2007 board meeting
Preliminary index to admin. record	February 1, 2007
Exchange witness list	March 1, 2007
Designate expert witness	March 15, 2007
Expert reports deadline	April 15, 2007
Discovery cutoff	June 30, 2007
Dispositive motion and responses cut	August 15, 2007

off	
Final administrative record due	August 30, 2007
Pretrial hearing	October board meeting
Hearing on the merits (case #2)	November 2007

Respectfully submitted this 22nd day of December, 2006.

MARK L. SHURTLEFF
Attorney General



Paul M. McConkie
Christian C. Stephens
Assistant Attorneys General

The foregoing Proposed Scheduling Order, was hand-delivered, e-mailed, and/or mailed postage pre-paid, to the following this 22 day of December, 2006.

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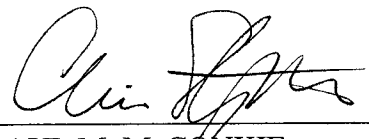
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BEFORE THE UTAH AIR QUALITY BOARD

In the Matter of: Unit 3, Intermountain Power Service Corporation, Millard County, Utah DAQE-AN0327010-04	PROPOSED SCHEDULING ORDER
------------------------------------------------------------------------------------------------------------------------	---------------------------

COMES NOW the Executive Secretary of the Utah Division of Air Quality ("UDAQ"), through undersigned counsel, and hereby submits the following proposed scheduling order in the above-captioned matter.

ACTION	PROPOSED DATE
Responses to outstanding petitions to intervene and requests for agency action	Prior to January 3, 2007 board meeting
Hearing and decision of Air Quality Board about potential intervening parties	January 3, 2007 board meeting
Discovery begins	January 3, 2007 board meeting
Preliminary index to admin. record	February 1, 2007
Exchange witness list	March 1, 2007
Designate expert witness	March 15, 2007
Expert reports deadline	April 15, 2007

Discovery cutoff	June 30, 2007
Dispositive motion and responses cutoff	August 15, 2007
Final administrative record due	July 31, 2007
Pretrial hearing	August board meeting
Hearing on the merits	September 2007

Respectfully submitted this 22nd day of December, 2006.

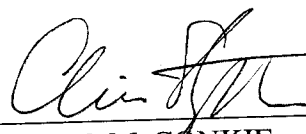
MARK L. SHURTLEFF
Attorney General



Paul M. McConkie
Christian C. Stephens
Assistant Attorneys General

The foregoing Proposed Scheduling Order, was hand-delivered, e-mailed, and/or mailed postage pre-paid, to the following this 22 day of December, 2006.

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BEFORE THE UTAH AIR QUALITY BOARD

In the Matter of:	
Sevier Power Company Power Plant Sevier County, Utah DAQE-AN2529001-04	PROPOSED SCHEDULING ORDER

COMES NOW the Sevier Power Company (“SPC”), through undersigned counsel, and herby submits the following proposed scheduling order in the above-captioned matter.

ACTION	PROPOSED DATE
Responses to outstanding petitions to intervene and requests for agency action.	Prior to January 3, 2007 board meeting.
Hearing and decision of Air Quality Board about potential intervening parties.	January 3, 2007 board meeting.
Discovery begins.	January 3, 2007 board meeting.
Preliminary index to administrative record.	February 1, 2007
Expert reports due	March 16, 2007
Discovery cut off	April 2, 2007

Dispositive motion and responses cut off.	May 1, 2007
Final administrative record due	May 15, 2007
Pretrial hearing	June Board meeting
Hearing on the merits	July 2007

This proposed schedule is based on the Board proceeding on both the SPC and the IPP cases concurrently. When issues in this matter and the IPA Unit #3 are similar, it would be the plan of SPC to ask the Board for a consolidation motion of those issues. This would allow common issues to be consolidated and allow for the unique issues to continue on separate tracks.

Dated December 22, 2006

SEVIER POWER COMPANY

Fred W. Finlinson
Finlinson & Finlinson, PLLC
Attorneys for Sevier Power
Company

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of December, 2006, the foregoing SEVIER POWER COMPANY'S PROPOSED SCHEDULING ORDER, was e-mailed pursuant to agreement with Counsel of the Parties, as indicated to the following:

Fred Nelson at fnelson@utah.gov

Joro Walker at jwalker@westernresources.org

Chris C. Stephens at cstephens@utah.gov

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DRAFT
2005 Regional SO₂ Emissions and Milestone Report

December 20, 2006

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DRAFT

2005 Regional SO₂ Emissions and Milestone Report

Executive Summary

Under Section 309 of the federal Regional Haze Rule, nine western states and tribes within those states have the option of submitting plans to reduce regional haze emissions that impair visibility at 16 Class I national parks and wilderness areas on the Colorado Plateau. Five states -- Arizona, New Mexico, Oregon, Utah, and Wyoming -- exercised this option by submitting plans to EPA by December 31, 2003. The tribes were not subject to the deadline and still can opt into the program at any time. Under the Section 309 plans, these five states have begun to track the emissions of the applicable stationary sources as part of the pre-trigger portion of the SO₂ Milestone and Backstop Trading Program. The Western Regional Air Partnership (WRAP) is assisting these states with the implementation and management of the regional emission reduction program.

As part of this program, the participating states must submit an annual Regional Sulfur Dioxide (SO₂) Emissions and Milestone Report that compares emissions to milestones. A milestone is a maximum level of annual emissions for a given year. The first report was submitted in 2004 for the calendar year 2003.

The milestone for 2005 was set at 446,903 tons for the five-state region. To determine whether or not the milestone was met, the 2003, 2004, and 2005 adjusted emissions were averaged, and this average was compared to the 2005 milestone. The adjustments to reported emissions were required to allow the current emissions estimates to be comparable to the emissions monitoring or calculation method used in the base year inventory (1999 for utilities and 1998 for all other sources).

The states of Arizona, New Mexico, Oregon, Utah, and Wyoming reported 284,911 tons of SO₂ emissions for the calendar year 2005. The total emissions increased to 304,591 tons of SO₂ after making adjustments to account for changes in monitoring and calculation methods. The adjustments result in an additional 19,680 tons of SO₂ emissions, which is about 7% of the reported total emissions. Adjustments required for changes in Part 75, Acid Rain Program, flow monitor quality assurance methods account for about 17,619 tons (90%) of the increase in the estimate, with the remaining 2,061 tons from other types of monitoring and calculation method changes. The 2005 adjusted emissions total of 304,591 tons was lower than the 2004 adjusted emissions total of 330,679 tons. The average of 2003, 2004, and 2005 adjusted emissions is 324,413 tons.

Based on this average adjusted annual emissions estimate, a preliminary determination has been made that the five states have met the 2005 regional SO₂ milestone of 446,903 tons. The 446,903 ton milestone was determined as

Based on the adjusted milestone and emissions data, the average of 2003, 2004, & 2005 emissions is about 27% below the 2005 five state regional milestone.

described in Section 51.309(h)(1)(i) and the 309 State Implementation Plans (SIPs). The milestone includes an adjustment to the base milestone to subtract emissions for western states not participating. The SIPs contain additional provisions to adjust the milestones to reflect variations in smelter operations, and to account for enforcement actions (to reduce the milestones where an enforcement action identified that emissions in the baseline period were greater than allowable emissions). Based on emissions data received from the states and SIP requirements regarding adjustments to the milestones, the 2005 period does not require a smelter adjustment, or adjustments for enforcement actions.

The SIPs also require that the annual report identify changes in the source population from year to year and significant changes in a source's emissions from year to year. The significant emissions changes from 2004 to 2005 are included in Section 7 of this report. A list of facilities added to or removed from the list of subject sources included in the base year inventories is included in Appendix B.

Table ES-1
Overview of 2005 Regional Milestone and Emissions for Section 309 Participating States

<u>2005 Sulfur Dioxide Milestone</u>	
Base Regional 2005 Milestone*	682,000 tons
Adjustments**	
States and Tribes not Participating in the Program	-235,097 tons
Smelter Operations	0 tons
Enforcement	0 tons
Adjusted 5-State 2005 Milestone	446,903 tons
<u>2005 Sulfur Dioxide Emissions</u>	
Reported 5-State 2005 Emissions	284,911 tons
Adjustments***	
Part 75 Flow Rate Procedures	17,619 tons
Other Emission Monitoring and Calculation Methods	2,061 tons
Adjusted 5-State 2005 Emissions	304,591 tons
<u>Average Sulfur Dioxide Emissions (2003, 2004 & 2005)</u>	
Adjusted 5-State 2005 Emissions	304,591 tons
Adjusted 5-State 2004 Emissions	337,970 tons
Adjusted 5-State 2003 Emissions	330,679 tons
Average of 2003, 2004 & 2005 Adjusted 5-State Emissions	324,413 tons
<u>Comparison of Emissions to Milestone</u>	
Average of 2003, 2004 & 2005 Adjusted 5-State Emissions	324,413 tons
Adjusted 5-state 2005 Milestone	446,903 tons
Difference (negative value = emissions < milestone)	-122,490 tons
2003 - 2005 Emissions Average as Percent of 2005 Milestone	73%

* See 40 CFR 51.309(h)(1), Table 1, Column 3, and the Regional Milestones section of each state's 309 SIP.
(Applies if neither the BHP San Manuel nor the Phelps Dodge smelter facilities resume operation.)

** See 40 CFR 51.309(h)(1)(i), and (ii), and (v)-(viii), and the Regional Milestones section of each state's 309 SIP.

*** See 40 CFR 51.309(h)(1)(iii) and (iv), and the Annual Emissions Report section of each state's 309 SIP.

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2005 Regional SO₂ Emissions and Milestone Report

1.0 Introduction

1.1 Background

Under Section 309 of the federal Regional Haze Rule (40 CFR Part 51), nine western states and the tribes within those states have the option of submitting plans to reduce regional haze emissions that impair visibility at 16 Class I national parks and wilderness areas on the Colorado Plateau. Five states -- Arizona, New Mexico, Oregon, Utah, and Wyoming -- and the city of Albuquerque, New Mexico exercised this option by submitting plans to EPA by December 1, 2003. The tribes were not subject to this deadline and still can opt into the program at any time.

Under the Section 309 State Implementation Plans (SIPs), these five states have begun to track emissions under the pre-trigger requirements of the SO₂ Milestone and Backstop Trading Program. The Western Regional Air Partnership (WRAP) is assisting these states with the implementation and management of this regional emission reduction program.

Under the milestone phase of the program, the states have established annual SO₂ emissions targets (from 2003 to 2018). These voluntary emissions reduction targets represent reasonable progress in reducing the emissions that contribute to regional haze. If the participating sources fail to meet the milestones through this voluntary program, then the states will trigger the backstop trading program and implement a regulatory emissions cap for the states, allocate emissions allowances (or credits) to the affected sources based on the emissions cap, and require the sources to hold sufficient allowances to cover their emissions each year.

This report is the third annual report for the milestone phase of this program. The report provides background on regional haze and the Section 309 program, the milestones established under the program, and the emissions reported for 2005. Based on the first three years, the voluntary milestone phase of the program is working, and emissions are well below the target levels.

What is Regional Haze?

Regional haze is air pollution that is transported long distances and reduces visibility in national parks and wilderness areas across the country. Over the years this haze has reduced the visual range from 145 kilometers (90 miles) to 24-50 kilometers (15-31 miles) in the East, and from 225 kilometers (140 miles) to 56-145 kilometers (35-90 miles) in the West. The pollutants that create this haze are sulfates, nitrates, organic carbon, elemental carbon, and soil dust. Human-caused haze sources include industry, motor vehicles, agricultural and forestry burning, and windblown dust from roads and farming practices.

What U.S. EPA Requirements Apply?

In 1999, the Environmental Protection Agency (EPA) issued regulations to address regional haze in 156 national parks and wilderness areas across the country. These regulations were published in the Federal Register on July 1, 1999 (64 FR 35714). The goal of the Regional Haze Rule (RHR) is to eliminate human-caused visibility impairment in national parks and wilderness areas across the country. It contains strategies to improve visibility over the next 60 years, and requires states to adopt implementation plans.

EPA's RHR provides two paths to address regional haze. One is 40 CFR 51.308 (Section 308), and requires most states to develop long-term strategies out to the year 2064. These strategies must be shown to make "reasonable progress" in improving visibility in Class I areas inside the state and in neighboring jurisdictions. The other is 40 CFR 51.309 (Section 309), and is an option for nine states -- Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and Wyoming -- and the 211 tribes located within these states to adopt regional haze strategies for the period from 2003 to 2018. These strategies are based on recommendations from the Grand Canyon Visibility Transport Commission (GCVTC) for protecting the 16 Class I areas on the Colorado Plateau. Adopting these strategies constitutes reasonable progress until 2018. These same strategies can also be used by the nine western states and tribes to protect the other Class I areas within their own jurisdictions.

How Have the WRAP States Responded to EPA Requirements?

Of the nine states (and tribes within those states) that have the option under Section 309 of participating in a regional strategy to reduce SO₂ emissions, five states have submitted Section 309 SIPs to EPA. These states are Arizona, New Mexico, Oregon, Utah, and Wyoming. In addition, the City of Albuquerque has also submitted a Section 309 SIP. To date, no tribes have opted to participate under Section 309, and the other four states of the original nine opted to submit SIPs under Section 308 of the Regional Haze Rule.

The following summarizes a few key elements of the Section 309 process for the five states:

1. Section 309(d)(4)(i) requires SO₂ milestones in the SIP. Section 309(h)(1) contains the actual SO₂ milestones for each year from 2003 to 2018, and includes provisions for making adjustments to these milestones if necessary.
2. Section 309(d)(4)(ii) requires monitoring and reporting of stationary source SO₂ emissions in order to ensure the SO₂ milestones are met. The SIP must commit to reporting to the WRAP as well as to EPA. Section 309(h)(2) specifies that monitoring and reporting starts in 2003, and applies to all sources with reported SO₂ emissions over 100 tons per year. Section 309(h)(2) also contains provisions on how to document emission calculations, conduct recordkeeping, and comply with other reporting requirements.
3. Section 309(d)(4)(iii) requires that a SIP contain criteria and procedures for activating the trading program within 5 years if an annual milestone is exceeded. A Section 309 SIP

also must provide assessments in 2008, 2013, and 2018. Section 309(h)(3) describes the mechanism for comparing emissions to the milestones using annual emission reports, and allows for a regional planning organization like the WRAP to assist in performing this function. It also includes requirements for public and independent review.

This report responds to Item 3, above, and provides the annual report that compares the 2005 emissions against the milestones for the states that have submitted Section 309 SIPs to EPA.

What Elements Must the Regional SO₂ Emissions and Milestone Report Contain?

To facilitate compliance with the Section 309 SIPs, the WRAP has committed to compiling a regional report on emissions for each year. In accordance with the SIPs, the WRAP will compile the individual state emission reports into a summary report that includes:

1. Reported regional SO₂ emissions (tons/year).
2. Adjustments to account for:
 - Changes in flow rate measurement methods;
 - Changes in emissions monitoring or calculation methods; or
 - Enforcement actions or settlement agreements as a result of enforcement actions.
3. As applicable, average adjusted emissions for the last three years (which are compared to the regional milestone). Since this is the third report, 2003, 2004, and 2005 emissions are averaged.
4. Regional milestone adjustments to account for states/tribes not participating in the program and the operational status of certain smelters.

How Is Compliance with the SO₂ Milestone Determined?

While the WRAP assists with the preparation of this report, each state reviews the information in the report, and proposes a draft determination that the regional SO₂ milestone has either been met or exceeded. The draft determination is then submitted for public review and comment during the first part of 2007, culminating in a final report sent to EPA by March 31, 2007.

1.2 Report Organization

This report presents the regional SO₂ emissions and milestone information required by the 309 SIPs for the five states. The report is divided into the following sections, including two appendices:

- Reported SO₂ Emissions in 2005
- Monitoring Methodology Emissions Adjustments
- Three-year Average Emissions

- Enforcement Milestone Adjustments
- Smelter Milestone Adjustments
- Quality Assurance (including Source Change information)
- Preliminary Milestone Determination
- Appendix A - Facility Emissions and Emissions Adjustments
- Appendix B - Changes to SO₂ Emissions and Milestone Source Inventory

2.0 Reported SO₂ Emissions in 2005

All stationary sources with reported emissions of 100 tons or more per year in 2000 or any subsequent year are required to report annual SO₂ emissions. Table 1 summarizes the annual reported emissions from applicable sources in each state. The 2005 reported SO₂ emissions for each applicable source are listed in Appendix A, Table A-1.

Table 1
Reported 2005 SO₂ Emissions by State

State	Reported 2005 SO ₂ Emissions (tons/year)
Arizona	72,157
New Mexico	34,138
Oregon	16,549
Utah	42,233
Wyoming	119,834
TOTAL	284,911

3.0 Monitoring Methodology Emissions Adjustments

The annual emissions reports for each state include proposed emissions adjustments to ensure consistent comparison of emissions to the milestones. The adjustments account for any differences in emissions that result from changes in the monitoring or calculation methodology used in 2005 as compared to the methodology used to calculate baseline year emissions. The adjustments described in the following sections will also be performed in subsequent reports until the milestones are revised in the SIPs.

3.1 Changes in Part 75 Flow Rate Methodology

The 309 SIPs and Section 51.309(h)(1)(iv) spell out three specific methods for adjusting Part 75 Acid Rain Program electric generating unit emissions due to changes in quality assurance procedures for the flow monitor component of SO₂ continuous emission monitoring systems. These changes involve the use of new flow reference methods in the Relative Accuracy Test Audit (RATA), which were not available in the 1999 baseline year. The use of these new

methods (reference methods 2F, 2G, and 2H) are expected to result in a decrease in the SO₂ emissions measurement.

The three methods in the SIPs for adjusting for flow RATA reference method changes are outlined below:

1. Directly determine the difference in flow rate through a side-by-side comparison of data collected with the new and old flow reference methods during a RATA test.
2. Compare the annual average heat rate using Acid Rain heat input data (mmBtu) and total generation (MWhrs) as reported to the federal Energy Information Administration (EIA). Under this approach, the flow adjustment factor shall be calculated using the following ratio:

$$\frac{\text{Heat input/MW for first full year of data using new flow rate method}}{\text{Heat input/MW for last full year of data using old flow rate method}}$$

3. Compare the standard CFM per MW before and after the new flow reference method based on CEM data submitted in the Acid Rain Program, as follows:

$$\frac{\text{SCF/Unit of Generation for first full year of data using new flow rate method}}{\text{SCF/Unit of Generation for last full year of data using old flow rate method}}$$

New Mexico, Utah, Arizona, and Wyoming provided adjusted emissions for changes in the Part 75 flow RATA reference method for several plants: the Public Service Corp of New Mexico San Juan plant and the Tri-State Escalante plant in New Mexico; the PacifiCorp Carbon, Hunter, and Huntington plants and the Intermountain Power Service Corporation plant in Utah; the AEPCO Apache Station and Pinnacle West - Cholla Generating Station in Arizona; and the PacifiCorp Dave Johnston, Jim Bridger, Naughton, and Wyodak plants in Wyoming. Changes in the RATA flow reference method result in an upward adjustment for the 2005 SO₂ emissions of 17,619 tons.

The adjustment for each of these plants is listed below in Table 2. The Appendix table A-1 provides additional information on the flow RATA reference method changes, and which adjustment method was used for each plant.

Table 2
Adjustments for Changes in Part 75 Flow RATA

State	Source	Reported 2005 SO ₂ Emissions (tons)	Flow RATA Adjustment (tons)	Adjusted 2005 SO ₂ Emissions (tons)
AZ	AEPCO - Apache Station	2,657	13	2,670
AZ	Pinnacle West - Cholla Generating Station	22,027	77	22,104
NM	Public Service Co of New Mexico/San Juan Generating Station	16,587	2,584	19,171
NM	Tri-State Gen & Transmission/Escalante Station	1,293	538	1,831
UT	Intermountain Power Service Corporation - Intermountain Generation Station	3,596	18	3,614
UT	PacifiCorp - Carbon Power Plant	5,411	853	6,264
UT	PacifiCorp - Hunter Power Plant	6,277	940	7,217
UT	PacifiCorp - Huntington Power Plant	17,364	2,972	20,336
WY	PacifiCorp - Dave Johnston	19,751	4,109	23,860
WY	PacifiCorp - Jim Bridger	21,651	1,573	23,224
WY	PacifiCorp - Naughton	23,229	3,478	26,707
WY	PacifiCorp - Wyodak	7,732	464	8,196

3.2 Changes in Emissions Monitoring and Calculation Methodology

In addition to the specific flow reference method related requirement for Part 75 program sources, there is also a general requirement to account for any changes in emissions monitoring or calculation methods. The reported emissions are adjusted so that the adjusted emissions levels are comparable to the levels that would result if the state used the same emissions monitoring or calculation method that was used in the base year inventory (1999 for utilities and 1998 for all other sources). The net impact throughout the region as a result of these adjustments is an increase of 2,061 tons from the reported 2005 emissions. Table 3 summarizes these results, and Appendix A provides additional source information. Some key aspects of the adjustments include:

- Oregon adjusted its 2005 SO₂ emissions inventory upwards by 2 tons.
- Utah adjusted their emissions upwards by 70 tons.

- Wyoming adjusted their emissions upward by 826 tons.
- Arizona did not report any emissions adjustments.
- The city of Albuquerque, New Mexico reported that plant baseline emissions were incorrect for two facilities which should not have been included in milestone calculations. In each case, the 1998 baseline emissions were based on the facility potential to emit, and not on reported emissions, which were less than 100 tons per year in 1998 and in each year since then. Thus, their emissions would not typically be included in this report, but until the milestones can be revised in the next SIP revision to correct the baseline error, these sources will be included and adjusted up to their potential to emit so that "paper decreases" in emissions are not counted towards meeting the milestones.
- New Mexico did not have information on the baseline year emissions calculation and monitoring methodologies, and thus did not make any adjustments for facilities under the state's jurisdiction. The 1998 baseline year corresponded to a period when New Mexico's inventory relied on the sources to calculate and report emissions. Also, during that period, New Mexico prepared an emissions inventory every other odd year (1997 and 1999).

Table 3
Adjustments for Changes in Monitoring Methodology
(Oregon, Utah, Wyoming, and Albuquerque, New Mexico)

State	Source	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Monitoring Methodology Adjustment (tons)	Comment
NM	GCC Rio Grande Cement	16	1,103	1,087	Facility potential to emit was used for the baseline year calculation. Adjustment is equal to the difference between reported and potential emissions.
NM	Southside Water Reclamation Plant	44	120	76	Facility potential to emit was used for the baseline year calculation. Adjustment is equal to the difference between reported and potential emissions.

(cont.)

Table 3
Adjustments for Changes in Monitoring Methodology
(Oregon, Utah, Wyoming, and Albuquerque, New Mexico) (cont.)

State	Source	Reported 2005 SO₂ Emissions (tons)	Adjusted 2005 SO₂ Emissions (tons)	Monitoring Methodology Adjustment (tons)	Comment
OR	Weyerhaeuser Company	229	231	2	State emission factor changed. Methodology did not.
UT	Chevron Products Co. - Salt Lake Refinery	2,201	1,780	-421	AP42 emission factor changed. In calculating flares, method changed from AP42 to engineering data.
UT	Graymont Western US Inc. - Cricket Mountain Plant	8	415	407	AP42 emission factors changed. Method of calculating Kiln emissions changed from permit limit to stack test.
UT	Tesoro West Coast - Salt Lake City Refinery	880	846	-34	Reported emissions include SO ₃ . SO ₃ was not included in 1998.
UT	Holly Ref. - Phillips Refinery	574	692	118	Changed the estimation method from AP42 in 1998 to CEM.
WY	Anadarko E&P Co LP - Brady Gas Plant	84	149	65	Thermal oxidizer used stack test and hours of operation in 1998; went to CEM in 2002.
WY	Black Hills Corporation - Neil Simpson I	945	1,013	68	Mass balance approach replaced the 1990 stack test results used in the baseline year.
WY	Frontier Oil & Refining - Cheyenne	1,438	1,460	22	Source 43 coker flare used stack test and coke cycle time for hours in 1998; went to permitted limit and ratio of reported/permitted throughput in 2001.
WY	Solvay Minerals - Soda Ash Plant	68	100	32	Change in calculation method from base year.
WY	Sinclair Oil Company - Sinclair Refinery	1,740	2,379	639	FCC unit used stack test and hours of operation in 1998; went to CEM in 2004.

4.0 Three-Year Average Emissions (2003, 2004, and 2005)

The SIPs require multi-year averaging of emissions from 2004 to 2017 for the milestone comparison. From 2005 to 2017, a three-year average (which includes the reporting year and the two previous years) will be calculated to compare with the milestone. The average of the three years' emissions from 2003 to 2005 is 324,413 tons, which is less than the 2005 adjusted milestone of 446,903 tons. Table 4 shows the adjusted emissions for each year and three year average emissions. The following report sections describe the adjusted milestone determination.

Table 4
Average Sulfur Dioxide Emissions (2003, 2004 & 2005)

Year	Adjusted SO ₂ Emissions (tons/year)
2003	330,679
2004	337,970
2005	304,591
Three Year Average (2003, 2004, 2005)	324,413

5.0 Enforcement Milestone Adjustments

The SIPs require that each state report on proposed milestone adjustments that are due to enforcement actions which affect baseline year emissions. The purpose of this adjustment is to remove emissions that occurred above the allowable level in the baseline year from the baseline and the annual milestones. The enforcement milestone adjustments require an approved SIP revision before taking effect (See Section 51.309(h)(1)(v) of the Regional Haze Rule).

Enforcement Milestone Adjustment

There were no proposed enforcement action related milestone adjustments reported for 2005.

6.0 Smelter Milestone Adjustments

Smelter Adjustment Scenarios

There are two general milestone adjustment scenarios for smelters in the 309 SIPs and 40 CFR 51.309(h)(1)(ii). First, if either the BHP San Manuel (Arizona) or Phelps Dodge Hidalgo (New Mexico) smelter resumes operation, the milestones will be increased. Once the adjustments have been made for each smelter, the milestones would not be changed due to future suspensions or changes in plant operations, except as specifically provided in the regulations. At this point neither of these smelters has resumed operation, so this type of adjustment does not apply for the 2005 period.

The second type of adjustment applies to the operations at the remaining smelters. If one or both of the BHP San Manuel or Phelps Dodge Hidalgo smelters do not resume operation, the state or tribe will determine the amount of facility specific set-aside, if any, that will be added to the milestone to account for operational increases at the remaining smelters. This set-aside is only available for use if the annual sulfur input and emissions from the copper smelters are above the baseline levels listed in the applicable SIP. The increase to the milestone is based on a smelter's proportional increase above its baseline sulfur input.

2005 Smelter Adjustment

A comparison of smelter 2005 emissions to baseline levels in Table 3B of Section 51.309 is provided in Table 5, and shows that none of the operating smelters reported 2005 SO₂ emissions that exceed the baseline emissions. Therefore, the milestone adjustment from the facility-specific set-asides does not apply in 2005.

Table 5
Smelter 2005 SO₂ Emissions and Baseline SO₂ Emissions

State	Source	Reported 2005 SO ₂ Emissions (tons)	SO ₂ Baseline Emissions (tons)
AZ	BHP San Manuel	0	16,000
AZ	Asarco Hayden	12,723	23,000
AZ	Phelps Dodge Miami	7,366	8,000
NM	Phelps Dodge Hurley	1	16,000
NM	Phelps Dodge Hidalgo	0	22,000
UT	Kennecott Salt Lake	777	1,000

7.0 Quality Assurance

The states provided 2005 emissions data based on their state emissions inventories. For this report, additional quality assurance (QA) procedures were used to supplement the normal QA procedures the states follow for their emissions inventories. First, each state submitted a source change report, and second, the states compared their inventory data for utility sources against 40 CFR Part 75 Acid Rain Program monitoring data.

7.1 Source Change Report

Section 51.309(v) and the SIPs require that this annual SO₂ emissions and milestone report include a description of source changes or exceptions report to identify:

- Any new sources that were not contained in the previous calendar year's emissions report, and an explanation of why the sources are now included in the program;

- Identification of any sources that were included in the previous year's report and are no longer included in the program, and an explanation of why this change has occurred; and
- An explanation for emissions variations at any applicable source that exceeds ± 20 percent from the previous year.

No sources were added or removed from the program inventory in 2005. A list of sources that were added or removed from the program inventory in previous reporting years is provided in Appendix B. Table 6 provides explanations for the emissions variations from 2004 to 2005 that are greater than 20 percent. Plants with variations greater than 20 percent, but reported emissions of less than 20 tons, are not included in Table 6. Information on these plants is provided in Appendix A.

Table 6
Sources with an Emissions Change of > ±20% from the Previous Year

State	County FIP Code	State Facility ID	Reported 2004 SO ₂ Emissions (tons)	Reported 2005 SO ₂ Emissions (tons)	Facility Name	Reason for Change
AZ	017	1807	2,020	1,516	Abitibi - Snowflake Pulp Mill	Reduced operations and decrease in coal sulfur content
AZ	019	2869	107	6	Arizona Portland Cement	Emissions back to normal
AZ	007	2435	19,395	12,723	ASARCO - Hayden Smelter	Reduced throughput
AZ	003	2148	126	755	CLC - Douglas Lime Plant	Facility fully operational
AZ	001	4477	13,950	10,480	SRP - Coronado Generating Station	Decrease in coal sulfur content
AZ	001	3222	17,976	9,882	TEP - Springerville Generating Station	Low sulfur coal used and upgraded existing controls
AZ	015	5992	850	1,025	CLC - Nelson Lime Plant	Use of higher sulfur content fuel
AZ	017	447	18,241	22,027	Pinnacle West - Cholla Generating Station	Increased production. No capacity increase.
NM	007	350070001	196	149	Raton Pub. Service/Raton Power Plant	Retired standby/back-up boiler #4
NM	015	350150002	465	295	Frontier Field Services/Empire Abo Plant [Old names: BP America Production/Empire Abo Plant; Arco Permian/Empire Abo Plant]	Decreased usage of emergency flares and amine unit
NM	015	350150008	2,565	905	Marathon Oil/Indian Basin Gas Plant	Decreased usage of emergency flares and amine unit
NM	015	350150010	142	102	Navajo Refining Co/Artesia Refinery	Change in operation
NM	015	350150011	1,210	528	Duke Energy Field Services/Artesia Gas Plant	Decreased usage of emergency flares and SRU
NM	025	350250007	535	771	J L Davis Gas Processing/Denton Plant	Increased usage of the zink acid gas flare

(cont.)

Table 6
Sources with an Emissions Change of > ±20% from the Previous Year (cont.)

State	County FIP Code	State Facility ID	Reported 2004 SO ₂ Emissions (tons)	Reported 2005 SO ₂ Emissions (tons)	Facility Name	Reason for Change
NM	025	350250035	7,837	1,874	Duke Energy Field Services/Linam Ranch Gas Plant [Old name: GPM GAS/LINAM RANCH GAS PLANT]	Decreased usage of amine units
NM	025	350250044	8,023	305	Duke Energy Field Services/Eunice Gas Plant [Old name: GPM GAS EUNICE GAS PLANT]	Decreased usage of flares
NM	025	350250060	1,933	2,567	Targa Midstream Services/Eunice Gas Plant[Old names: Dynegy Midstream Services/Eunice Gas Plant; WARREN PETROLEUM/EUNICE GAS PLANT]	Increased usage of flares and SRU
NM	025	350250061	2,416	1,114	Targa Midstream Services/Monument Plant [Old names: Dynegy Midstream Services/Monument Plant; WARREN PETROLEUM/MONUMENT PLANT]	Decreased usage of flares and SRU
NM	025	350250063	569	358	Targa Midstream Services/Saunders Plant [Old names: Dynegy Midstream Services/Saunders Plant; WARREN PETROLEUM/SAUNDERS PLANT]	Decreased usage of flares and SRU
OR	005	2145	516	203	West Linn Paper Company	Production activity decreased from 2004 to 2005.

(cont.)

Table 6
Sources with an Emissions Change of > ±20% from the Previous Year (cont.)

State	County FIP Code	State Facility ID	Reported 2004 SO ₂ Emissions (tons)	Reported 2005 SO ₂ Emissions (tons)	Facility Name	Reason for Change
OR	041	0005	418	259	Georgia-Pacific West, Inc.	Production activity decreased from 2004 to 2005.
OR	043	0471	160	229	Weyerhaeuser Company	Production activity increased from 2004 to 2005.
OR	045	0002	775	0	The Amalgamated Sugar Company	No processing of sugar beets in 2005.
UT	011	10119	1,365	2,201	Chevron Products Co. - Salt Lake Refinery	The company had a large increase in breakdowns from 2004 to 2005. AP42 emission factor change (adjustment of +0.44). Calculation method for flares changed from AP42 to engineering data (Adjustment of -421.02).
UT	037	10034	795	293	EnCana Oil & Gas (USA) Incorporated (was Tom Brown Incorporated) - Lisbon Natural Gas Processing Plant	The company had a large decrease in natural gas consumption.
UT	011	10123	474	574	Holly Refining and Marketing Co.-Phillips Refinery	There was a large increase in the amount of mixed fuel consumed.
UT	027	10313	418	8	Graymont Western US Inc. - Cricket Mountain Plant	AP42 emission factors changed (adjustment of -0.027). Method of calculating Kiln emissions changed from permit limit to stack test (adjustment of +406.857).
WY	011	0002	68	211	American Colloid Mineral Co. - East Colony	Natural Process Variation: SO ₂ emissions associated with natural gas combustion in the unit & belt heaters is included in the dryer emissions.
WY	011	0003	51	180	American Colloid Mineral Co. - West Colony	Natural Process Variation: The only sources of SO ₂ emissions are the dryers & heaters, all of which are combustion emissions.

(cont.)

Table 6
Sources with an Emissions Change of > ±20% from the Previous Year (cont.)

State	County FIP Code	State Facility ID	Reported 2004 SO ₂ Emissions (tons)	Reported 2005 SO ₂ Emissions (tons)	Facility Name	Reason for Change
WY	013		2,163	0	Burlington Resources - Bighorn Wells	Natural Process Variation: No Flaring from the Madden Field in 2005.
WY	013	0028	2,230	1,232	Burlington Resources - Lost Cabin Gas Plant	Natural Process Variation: Lower SO ₂ emissions due to improved plant operation, resulting in fewer flaring episodes.
WY	041	0009	26	1,122	Chevron USA - Carter Creek Gas Plant	Process Change: Turnaround in August 2005 & a change in the Operating Plan.
WY	037		150	0	Chevron USA - Table Rock Field	Natural Process Variation: No flares in 2005.
WY	041		812	385	Chevron USA - Whitney Canyon/Carter Creek Wellfield	Natural Process Variation: Emergency and planned flaring breaks.
WY	013	0008	37	59	Devon Energy Corp. - Beaver Creek Gas Plant	Natural Process Variation: EP-14 Plant Flare (F-1)
WY	023		46	20	Exxon Mobil Corporation - LaBarge Black Canyon Facility	Natural Process Variation from 4 emission points: FL 240/(A), FL 240/(B), FL2402(A) & FL2402(B).
WY	023	0013	1,237	2,300	Exxon Mobil Corporation - Shute Creek	Natural Process Variation: Emission event exceedance on 4/5/05. Increased flare volumes for the month of July, and a flaring event on 12/14/2005.
WY	037	0049	5,387	54	FMC Wyoming Corp. - Granger Soda Ash Plant	#1 Coal-fired Boiler was restarted after 3+ years of inactivity. (Facility was mothballed in 2002)
WY	001	0002	197	139	Mountain Cement Co. - Laramie Plant	Natural Process Variation: (Kiln #1 & Kiln #2 with CEM). Reflected in the Quarterly Ambient Air Quality Reports.
WY	037	0003	955	618	P4 Production, LLC - Rock Springs Coal Calcining Plant	Natural Process Variation: Decrease in SO ₂ emissions was due to lower tested values.

(cont.)

Table 6
Sources with an Emissions Change of > ±20% from the Previous Year (cont.)

State	County FIP Code	State Facility ID	Reported 2004 SO₂ Emissions (tons)	Reported 2005 SO₂ Emissions (tons)	Facility Name	Reason for Change
WY	007	0001	2,749	1,740	Sinclair Oil Company - Sinclair Refinery	Natural Process Variation: Change in Calculation Methodology for the Fluid Catalytic Cracking Unit (FCCU) (Source #9).
WY	037		53	68	Solvay Minerals - Soda Ash Plant	Natural Process Variation: 67.13 tons of SO ₂ Emissions from 2 boilers, & 1.15 tons of SO ₂ Emissions from 3 other emission points.
WY	015	0001	99	131	The Western Sugar Cooperative - Torrington	Natural Process Variation: 36% increase in the operating hours for the 4 Sterling Boilers.
WY	001	0005	204	150	University of Wyoming - Heat Plant	Natural Process Variation: Plant usually burns coal year round.

7.2 Part 75 Data

Federal Acid Rain Program emissions monitoring data (required by 40 CFR Part 75) were used to check reported power plant emissions, and whether or not a monitoring method adjustment was required for changes in Part 75 quality assurance procedures as described in section 3.1 of this report.

Sources in the region subject to Part 75 emitted about 70% of the region's reported emissions in 2005. EPA's Data and Maps website was queried to obtain power plant SO₂ emissions in the five states which were then compared to totals reported by each state for those plants. The regional haze rule requires the use of Part 75 methods for Part 75 sources, so the reported emissions should match.

EPA's database for the Acid Rain Program also was queried to obtain the flow reference method used in the RATAs reported by the plants since the 1999 baseline year. This information was used to check if there had been a change in flow reference methods since the 1999 baseline year.

8.0 Milestone Determination

The average of 2003, 2004 and 2005 adjusted emissions were determined to be 324,413 tons. Therefore, the participating states have met the adjusted regional 2005 milestone of 446,903 tons.

The 2005 milestone for the five participating states was determined as provided in Section 51.309(h)(1) of the rule and the Section 309 SIPs. First, the 682,000 ton milestone in Table 1 (column 3) of the rule is adjusted for states and tribes that have not yet opted to participate in the 309 program by subtracting the amount, as provided in Section 51.309(h)(1)(i), Table 2, for each state or tribe. The milestone does not need to be adjusted to account for changes in smelter operations or enforcement actions. This results in an adjusted milestone of 446,903 tons. Table 7 shows each element of the 2005 milestone calculation.

Table 7
Regional 2005 SO₂ Emissions Milestone for the Five States

Base Regional 2005 Milestone*	682,000 tons
Milestone Adjustments**	
States and Tribes not participating in the backstop program:	
California	-37,343 tons
Colorado	-98,897 tons
Idaho	-18,016 tons
Nevada	-20,187 tons
Shoshone-Bannock Tribe of the Fort Hall Reservation	-4,994 tons
Navajo Nation	-53,147 tons
Ute Indian Tribe of the Uintah and Ouray Reservation	-1,129 tons
Wind River Reservation	-1,384 tons
Smelter Set-Aside***	0 tons
Enforcement	0 tons
Adjusted 5-State 2005 Milestone	
(Arizona, New Mexico, Oregon, Utah, Wyoming)	446,903 tons

* See 40 CFR 51.309(h)(1), Table 1, Column 3, and the Regional Milestones section of each state's 309 SIP (applies if neither the BHP San Manuel nor the Phelps Dodge smelter facilities resume operation).

** See 40 CFR 51.309(h)(1)(i), and (ii), and (v)-(viii), and the Regional Milestones section of each state's 309 SIP.

*** The potential Smelter Set-Aside is 38,000 tons

Appendix A

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
AZ	017	1807		Abitibi - Snowflake Pulp Mill	2621	322121	1,516	1,516			Reduced operations & low sulfur coal used.
AZ	003	3532	160	AEPCO - Apache Generating Station	4911	221112	2,657	2,670	13		
AZ	019	2869		Arizona Portland Cement	3241	32731	6	6			Emissions back to normal.
AZ	007	2435		ASARCO - Hayden Smelter	3331	331411	12,723	12,723			Reduced operations.
AZ	021	15582		BHP - San Manuel Smelter	3331	331411	0	0			Facility has been shut down.
AZ	003	2148		CLC - Douglas Lime Plant	3274	32741	755	755			Facility in full operation.
AZ	015	5992		CLC - Nelson Lime Plant	3274	32741	1,025	1,025			
AZ	007	5129		Phelps Dodge - Miami Smelter	3331	331411	7,366	7,366			
AZ	025	2393		Phoenix Cement	3241	32731	7	7			
AZ	017	447	113	Pinnacle West - Cholla Generating Station	4911	221112	22,027	22,104	77		
AZ	001	4477	6177	SRP - Coronado Generating Station	4911	221112	10,480	10,480			Low sulfur coal used.
AZ	019		126	TEP - Irvington Generating Station	4911	221112	3,713	3,713			
AZ	001	3222	8223	TEP - Springerville Generating Station	4911	221112	9,882	9,882			Low sulfur coal used and upgraded existing controls

(cont.)

A-1

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
NM	007	350070001		Raton Pub. Service/Raton Power Plant	4911	221112	149	149			
NM	015	350150002		Frontier Field Services/Empire Abo Plant [Old names: BP America Production/Empire Abo Plant; Arco Permian/Empire Abo Plant]	1321	211112	295	295			Empire Abo Gas Plant is now owned and operated by Frontier Energy Services, LLC.
NM	015	350150008		Marathon Oil/Indian Basin Gas Plant	1321	211112	905	905			
NM	015	350150010		Navajo Refining Co/Artesia Refinery	2911	32411	102	102			
NM	015	350150011		Duke Energy Field Services/Artesia Gas Plant	1321	211112	528	528			
NM	015	350150024		Agave Dagger Draw Gas Plant (Old name: Agave Energy/Agave Gas Plant)	1311	211111	1,936	1,936			Agave Gas Plant and Duke Dagger Draw merged to form Agave Dagger Draw.
NM	025	350150138		Duke - Magnum/Pan Energy - Burton Flats	1321	211112	1	1			No longer a major source.
NM	015	350150285		Duke Energy/Dagger Draw Gas Plant	1321	211112	0	0			Agave Gas Plant and Duke Dagger Draw merged to form Agave Dagger Draw. See Facility ID 350150024.
NM	017	350170001		Phelps Dodge Hurley Smelter/Concentrator	3331	331411	1	1			
NM	023	350230003		Phelps Dodge Hidalgo Smelter	3331	331411	0	0			No longer a major source.

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
NM	025	350250004		Frontier Field Services/Maljamar Gas Plant	1321	211112	2,163	2,163			
NM	025	350250007		J L Davis Gas Processing/Denton Plant	1311	211111	771	771			
NM	025	350250008		Sid Richardson Gasoline/Jal #3	1321	211112	1,401	1,401			
NM	025	350250035		Duke Energy Field Services/Linam Ranch Gas Plant [Old name: GPM GAS/LINAM RANCH GAS PLANT]	1321	211112	1,874	1,874			
NM	025	350250044		Duke Energy Field Services/Eunice Gas Plant [Old name: GPM GAS EUNICE GAS PLANT]	1321	211112	305	305			
NM	025	350250051		Targa Midstream Services/Eunice South Gas Plant (Old name: Dynegy Midstream Services/Eunice South Gas Plant)	1321	211112	1	1			Eunice South Gas Plant is now owned by Versado Gas Processors, LLC and operated by Targa Midstream Services, LP. No longer a major source.
NM	025	350250060		Targa Midstream Services/Eunice Gas Plant[Old names: Dynegy Midstream Services/Eunice Gas Plant; WARREN PETROLEUM/EUNICE GAS PLANT]	1321	211112	2,567	2,567			Eunice Gas Plant is now owned by Versado Gas Processors, LLC and operated by Targa Midstream Services, LP.

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
NM	025	350250061		Targa Midstream Services/Monument Plant [Old names: Dynege Midstream Services/Monument Plant; WARREN PETROLEUM/MONUMENT PLANT]	1321	211112	1,114	1,114			Monument Gas Plant is now owned by Versado Gas Processors, LLC and operated by Targa Midstream Services, LP.
NM	025	350250063		Targa Midstream Services/Saunders Plant [Old names: Dynege Midstream Services/Saunders Plant; WARREN PETROLEUM/SAUNDERS PLANT]	1321	211112	358	358			Saunders Gas Plant is now owned by Versado Gas Processors, LLC and operated by Targa Midstream Services, LP.
NM	031	350310008		Giant Industries/Ciniza Refinery [Old name: GIANT REFINING/CINIZA]	2911	32411	942	942			
NM	031	350310032	87	Tri-State Gen & Transmission/Escalante Station	4911	221112	1,293	1,831	538		
NM	045	350450023		Giant Industries/San Juan Refinery (Bloomfield) [old name: GIANT INDUSTRIES/BLOOMFIELD REF]	2911	32411	393	393			
NM	045	350450247		Western Gas Resources/San Juan River Gas Plant	1321	211112	392	392			
NM	045	350450902	2451	Public Service Co of New Mexico/San Juan Generating Station	4911	221112	16,587	19,171	2,584		

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
OR	005	2145		West Linn Paper Company	2621	322121	203	203			
OR	007	0004		Fort James Operating Company	2621	322121	893	893			
OR	009	1849		Boise Cascade Corporation	2611	322121	1,728	1,728			
OR	041	0005		Georgia-Pacific West, Inc.	2631	322130	259	259			
OR	043	0471	54944	Weyerhaeuser Company	2621	322130	229	231		2	
OR	043	3501		Pope & Talbot, Inc.	2611	322121	488	488			
OR	045	0002	54612	The Amalgamated Sugar Company	2063	311313	0	0			
OR	049	0016	6106	Portland General Electric Company	4911	221121	12,022	12,022			
OR	051	1876		Owens-Brockway Glass Container Inc.	3221	327213	125	125			
OR	065	0001		Northwest Aluminum Company, Inc.	3334	331312	0	0			
OR	071	6142		Smurfit Newsprint Corporation	2611	322122	602	602			
UT	049	10790		Brigham Young University - Main Campus	8221	611310	154	154			AP42 Table 3.3-1 emission factor changed (adjustment of +0.134 tons/yr). Percent of sulfur and heating value changed for some fuels (no adjustment made).
UT	027	10311		Brush Resources Inc. - Delta Mill	1099	212299	0	0			Fuel changed from #5 fuel oil to natural gas and #2 diesel (no adjustment made).

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
UT	011	10119		Chevron Products Co. - Salt Lake Refinery	2911	324110	2,201	1,780		-421	AP42 emission factor change (adjustment of +0.44). Change from AP42 emission factor to engineering data in calculating flares (Adjustment of -421.02).
UT	049	10796		Geneva Steel - Steel Manufacturing Facility	3312	331221	0	0			Source has closed down.
UT	027	10313		Graymont Western US Inc. - Cricket Mountain Plant	1422	212312	8	415		407	AP42 emission factors changed (adjustment of -0.027). Method of calculating Kiln emissions changed from permit limit to stack test (adjustment of +406.857).
UT	029	10007		Holcim-Devil's Slide Plant	3241	327310	229	229			
UT	011	10123		Holly Refining and Marketing Co. - Phillips Refinery	2911	324110	574	692		118	The company changed the estimation method from AP42 in 1998 to CEM.
UT	027	10327	6481	Intermountain Power Service Corporation- Intermountain Generation Station	4911	221112	3,596	3,614	18		Wall Adjustment Factor (WAF) of 0.995 used on Flow RATA.
UT	035	10572		Kennecott Utah Copper Corp. - Power Plant/Lab/Tailings Impoundment	1021	212234	3,009	3,009			
UT	035	10346		Kennecott Utah Copper Corp. - Smelter & Refinery	3331	331411	777	777			
UT	007	10081	3644	PacifiCorp - Carbon Power Plant	4911	221112	5,411	6,264	853		The RATA method changed from method 2 in 1999 to method 2FH. The Flow Adjustment Factor calculated is 1.17 for unit 1 and 1.15 for unit 2.

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
UT	015	10237	6165	PacifiCorp - Hunter Power Plant	4911	221112	6,277	7,217	940		Two RATA methods were used in 1999, 2 and 2FH. The RATA method changed to method 2FH for the entire year. The Flow Adjustment Factor calculated is 1.09 for unit 1, 1.21 for unit 2, and 1.15 for unit 3.
UT	015	10238	8069	PacifiCorp - Huntington Power Plant	4911	221112	17,364	20,336	2,972		Two RATA methods were used in 1999, 2 and 2FH. The RATA method changed to method 2FH for the entire year. The Flow Adjustment Factor calculated is 1.11 for unit 1 and 1.18 for unit 2.
UT	007	10096		Sunnyside Cogeneration Associates - Sunnyside Cogeneration Facility	4911	221112	932	932			AP42 emission factor changed from 157S to 142S.
UT	035	10335		Tesoro West Coast-Salt Lake City Refinery	2911	324110	880	846		-34	The actual emissions included SO ₃ in 2005. SO ₃ was not included in the 1998 emissions.
UT	043	10676		Utelite Corporation - Shale processing	3295		167	167			
UT	049	10796		Geneva Steel - Steel Manufacturing Facility	3312	331221	0	0			Source has closed down.
UT	027	10313		Graymont Western US Inc. - Cricket Mountain Plant	1422	212312	8	415		407	AP42 emission factors changed (adjustment of -0.027). Method of calculating Kiln emissions changed from permit limit to stack test (adjustment of +406.857).
WY	011	0002		American Colloid Mineral Co - East Colony	1459	212325	211	211			

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
WY	011	0003		American Colloid Mineral Co - West Colony	1459	212325	180	180			
WY	037	0008		Anadarko E&P Co LP - Brady Gas Plant	1321	211112	84	149		65	Calculation Methods (Emission Test, Permitted Allowable, & Mass Balance).
WY	037			Anadarko E&P Co LP - Table Rock Gas Plant	1321		250	250			Calculation Methods (CEM Monitoring, & Mass Balance).
WY	023	0001		Astaris Production - Coking Plant	2999	324199	0	0			Plant is permanently shut down.
WY	031	0001	6204	Basin Electric - Laramie River Station	4911	221112	13,098	13,098			Calculation Method (CEMS Part 75).
WY	003	0012		Big Horn Gas Proc - Big Horn/Byron Gas Plant	1311	22121	0	0			Switched to sweet gas in Feb. 2001, and continues to process only treated gas.
WY	005	0002	4150	Black Hills Corporation - Neil Simpson I	4911	22112	945	1,013		68	Calculation Method (Chemical Mass Balance).
WY	005	0063	7504	Black Hills Corporation - Neil Simpson II	4911	22112	498	498			Calculation Method (2005 CEM's EDR 4th Qtr. Report).
WY	045	0005	4151	Black Hills Corporation - Osage Plant	4911	22112	3,094	3,094			Calculation Method (1998 Base Year & 1988 Stack Test).
WY	005	0146	55479	Black Hills Corporation - Wygen 1	4911	22112	538	538			Calculation Method (2005 CEM's EDR 4th Qtr. Report).
WY	041			BP America Production Company - Whitney Canyon WellField	1311		2	2			
WY	041	0012		BP America Production Company - Whitney Canyon Gas Plant & Field	1311	211111	3,590	3,590			Calculation Methods (CEM Data, Metered Flow & Emissions Testing).

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
WY	013			Burlington Resources - Bighorn Wells	1311		0	0			No flaring at wellsite in 2005.
WY	013	0028		Burlington Resources - Lost Cabin Gas Plant	1311	211111	1,232	1,232			Emission volumes based upon data submitted in LCGP Quarterly Reports, same as base year.
WY	041	0009		Chevron USA - Carter Creek Gas Plant	1311	211111	1,122	1,122			Turnaround in August 2005 & a change in the Operating Plan.
WY	037			Chevron USA - Table Rock Field	1311		0	0			No flares in 2005.
WY	041			Chevron USA - Whitney Canyon/Carter Creek Wellfield	1311		385	385			SO ₂ Calculation in Chapter 6, Section 2, page B14.
WY	013			Devon Energy Production Co., L.P. - Beaver Creek Gas Field			47	47			Tons H ₂ S (flared) * 1.8797 = SO ₂ emitted.
WY	013	0008		Devon Gas Services, L.P. - Beaver Creek Gas Plant	1311	211111	59	59			Tons H ₂ S (flared) * 1.8797 = SO ₂ emitted.
WY	023			Exxon Mobil Corporation - LaBarge Black Canyon Facility	1311		20	20			Calculation Method: AP-42 and actual volumes.
WY	023	0013		Exxon Mobil Corporation - Shute Creek	1311	211111	2,300	2,300			Turbines in operation since 2004; therefore, no change in methodology. (CEMs & AP-42).
WY	037	0048		FMC Corp - Green River Sodium Products (Westvaco facility)	2812	327999	5,005	5,005			SO ₂ emissions from "2" emission points: (NS-1A & NS -1B). CEM lb/mmBtu * Annual heat input.
WY	037	0049		FMC Wyoming Corporation - Granger Soda Ash Plant	1474	212391	54	54			Partial year operation of the #1 Coal-fired Boiler, as the facility was restarted after 3+ years. (CEMs).

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
WY	021	0001		Frontier Oil & Refining Company - Cheyenne Refinery	2911	32411	1,438	1,460		22	Source 43 Coker Flare used Stack Test & Coke Cycle Time for Hours in 1998.
WY	037	0002		General Chemical - Green River Plant (Facility Name:General Chemical)	1474	327999	5,216	5,216			SO ₂ emissions from "2" emission points: (C Boiler & D Boiler). Fuel use, fuel heat value, CEM.
WY	043	0003		Hiland Partners, LLC - Hiland Gas Plant	1321	48621	109	109			SO ₂ emissions from Acid Gas; Process & Safety Flares. Gas flow measurement, H ₂ S concentration & engineering calculations.
WY	029	0012		Howell Petroleum Corp - Elk Basin Gas Plant	1311	211111	1,313	1,313			SO ₂ emissions from "2" emission points: (SRU & F-1). CEM and Mass Balance.
WY	029	0007		Marathon Oil Co - Oregon Basin Gas Plant	1321	211112	328	328			Oregon Basin went to a mass CEM in 2002, but used a Mass Balance Calculation in the Base Year. However they no longer keep adequate records of inlet gas concentration to utilize the mass balance method. SO ₂ Emissions from "3" emission points: (Gas Incinerator, Sour Gas & Field Flares).
WY	001	0002		Mountain Cement Company - Laramie Plant	3241	23571	139	139			SO ₂ emissions from "2" emission points: (Kiln #1 & Kiln #2). CEM.
WY	037	0003		P4 Production, L.L.C. - Rock Springs Coal Calcining Plant	3312	331111	618	618			New Stack Test Results used for Emission Calculation do not represent a change in methodology.

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
WY	009	0001	4158	Pacificorp - Dave Johnston Plant	4911	221112	19,751	23,860	4,109		SO ₂ emissions from "4" emission points: (BW41, BW42, BW43 & BW44 & Flow Adjustment Factors: 1.11, 1.23, 1.19 & 1.28).
WY	037	1002	8066	Pacificorp - Jim Bridger Plant	4911	221112	21,651	23,224	1,573		SO ₂ emissions from "4" emission points: (BW71, BW72, BW73 & BW74 & Flow Adjustment Factors: 1.04, 1.13, 1.03 & 1.13).
WY	023	0004	4162	Pacificorp - Naughton Plant	4911	221112	23,229	26,707	3,478		SO ₂ Emissions from "3" emission points: (1, 2, & 3 & Flow Adjustment Factors: 1.05, 1.14, & 1.29).
WY	005	0046	6101	Pacificorp - Wyodak Plant	4911	221112	7,732	8,196	464		SO ₂ Emissions from "1" emission point: (BW91 & a Flow Adjustment Factor of 1.06).
WY	037	0022		Simplot Phosphates LLC - Rock Springs Plant	2874	325312	2,003	2,003			Source Test x Op Hours, AP-42 estimates, & AP-42 x Op Hours.
WY	025	0005		Sinclair Wyoming Refining Company - Casper Refinery	2911	32411	742	742			SO ₂ emissions from "23" emission points. Calculation Method is the same as the Base Year.
WY	007	0001		Sinclair Oil Company - Sinclair Refinery	2911	32411	1,740	2,379		639	FCC Unit used Stack Test x Hours in 1998; went to a CEM in 2004.
WY	037			Solvay Chemicals - Soda Ash Plant (Green River Facility)	1474		68	100		32	SO ₂ Emissions from "5" emission points: (AQD #18, #19, #33, #73 & #89). Calculation Methods: (lb/MMBtu x MMBtu & pph stack test x hr/yr). The base year for AQD #18 & #19 were calculated with pph stack test x hr/yr.

(cont.)

Table A-1
2005 Reported and Adjusted Emissions for Sources Subject to Section 309 - Regional Haze Rule (cont.)

State Abbreviation	County FIPS	State Facility Identifier	ORIS	Plant Name	Plant SIC	Plant NAICS	Reported 2005 SO ₂ Emissions (tons)	Adjusted 2005 SO ₂ Emissions (tons)	Part 75 Flow RATA Emission Adjustment (tons)	General New Monitoring Calculation Method Adjustment (tons)	Description/ Comments
WY	015	0001		The Western Sugar Cooperative - Torrington Plant	2063	311313	131	131			Coal Fired Sterling Boilers #3, #4, #5, & #6. (36% increase in operating hours).
WY	001	0005		University of Wyoming - Heat Plant	8221	61131	150	150			SO ₂ Emissions from "5" emission points: (#1 thru #4 Boilers & a Diesel Generator). Process change - plant usually burns coal year round.
WY	045	0001		Wyoming Refining - Newcastle Refinery	2911	32411	762	762			
NM	001	00008		GCC Rio Grande Cement	3241	327310	16	1,103		1,087	Facility potential to emit was used for the baseline year calculation. Adjustment is equal to the difference between potential and reported emissions.
NM	001	00145		Southside Water Reclamation Plant	4952	22132	44	120		76	Facility potential to emit was used for the baseline year calculation. Adjustment is equal to the difference between potential and reported emissions.

Appendix B

Table B-1
Sources Added to the SO₂ Emissions and Milestone Report Inventory

State	County FIP Code	State Facility ID	Facility Name	Report Year of Change
OR	005	2145	West Linn Paper Company	2003
UT	043	10676	Utelite Corporation - Shale processing	2003
WY	011	0002	American Colloid Mineral Company - East Colony	2003
WY	011	0003	American Colloid Mineral Company - West Colony	2003
WY	037		Anadarko E&P Company LP - Table Rock Gas Plant	2003
WY	005	0146	Black Hills Corporation - Wygen 1	2003
WY	041		BP America Production Company - Whitney Canyon Well Field	2003
WY	013		Burlington Resources - Bighorn Wells	2003
WY	037		Chevron USA - Table Rock Field	2003
WY	041		Chevron USA - Whitney Canyon/Carter Creek Wellfield	2003
WY	013	0008	Devon Energy Corp. - Beaver Creek Gas Plant	2003
WY	035		Exxon Mobil Corporation - Labarge Black Canyon Facility (also identified as Black Canyon Dehy Facility)	2003
AZ	019	2869	Arizona Portland Cement	2004
WY	013		Devon Energy Corp. - Beaver Creek Gas Field	2004

Table B-2
Sources Removed from the SO₂ Emissions and Milestone Report Inventory

State	County FIP Code	State Facility ID	Facility Name	Baseline Emissions (tons/year)	Reason for Change	Report Year of Change
OR	019	0007	Glenbrook Nickel Co	113	Closed since 2000	2003
OR	019	0036	International Paper	1,006	Program did not meet 100 TPY program criteria	2003
OR	051	1851	Reynolds Metals Co	503	Closed since 2001	2003
WY	043	0001	Western Sugar Company - Worland	154	Emissions did not meet 100 TPY program criteria	2003
WY	017	0006	KCS Mountain Resources - Golden Eagle	942	Emissions did not meet 100 TPY program criteria	2003
WY	003	0017	KCS Mountain Resources - Ainsworth	845	Closed since 2000	2003
WY	017	0002	Marathon Oil - Mill Iron	260	Emissions did not meet 100 TPY program criteria	2003
AZ	021	15582	BHP - San Manuel Smelter	10,409	Facility is permanently closed.	2004
UT	049	10796	Geneva Steel - Steel Manufacturing Facility	881	Plant is shut down and disassembled.	2004
WY	023	0001	Astaris Production - Coking Plant	1,454	Plant is permanently shut down and dismantled.	2004



State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQC-1651-2006

MEMORANDUM

TO: Air Quality Board
FROM: Richard W. Sprott, Executive Secretary
DATE: December 6, 2006
SUBJECT: Compliance Activities – November 2006

Annual Inspections Conducted:

A 9
SM 3
B..... 9

Initial Compliance Inspections Conducted:

A 2
SM 0
B..... 2

On-Site stack test audits conducted: 3

Stack test report reviews: 13

On-site CEM audits conducted: 20

Emission reports reviewed: 19

¹Miscellaneous inspections conducted 11

Complaints received: 16

VOC inspections:

Tanker trucks 3
Degreasers 2
Paint Booths 20

Source Compliance Action Notice issued..... 4
Notices of Violation issued..... 0

Compliance Advisories issued..... 4

Settlement Agreements resolved..... 1

Penalties Collected..... \$4,183.20

Notices of Violations issued:

None

Compliance Advisories issued:

Pine Factory

Great Salt Lake Minerals

John Kuhni Sons, Inc.

Alpha Transport

Settlement Agreements Reached:

Salt Lake City Corp. \$1,600.00

Staker and Parsons \$2,583.20

¹Miscellaneous inspections include, e.g., surveillance, level I inspections, complaints, on-site training, dust patrol, smoke patrol, open burning, etc.



State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

MEMORANDUM

DAQH-0936-06

TO: Utah Air Quality Board

FROM: Richard W. Sprott, Executive Secretary

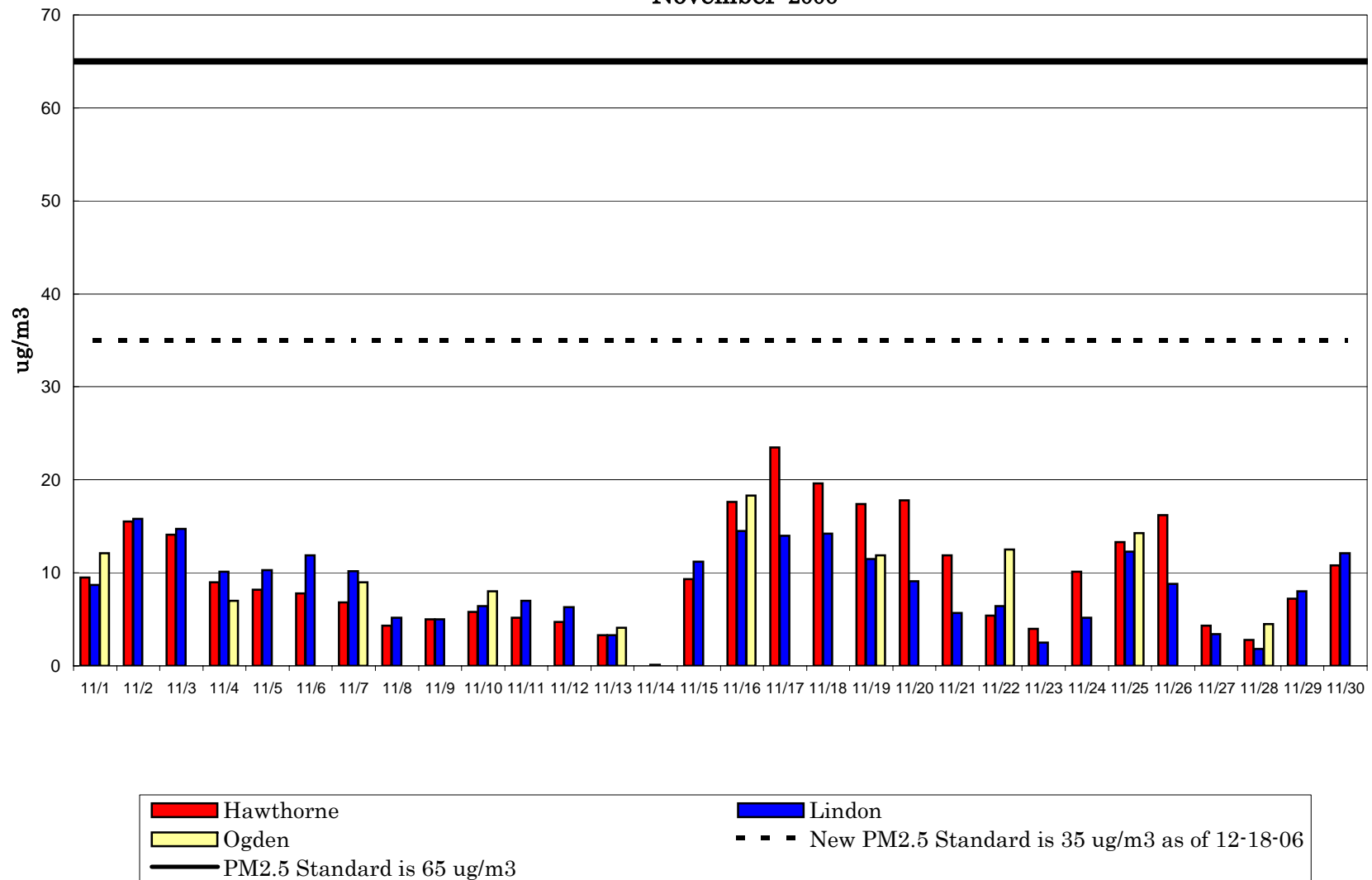
DATE: December 14, 2006

SUBJECT: Hazardous Air Pollutant Section Compliance Activities – November 2006

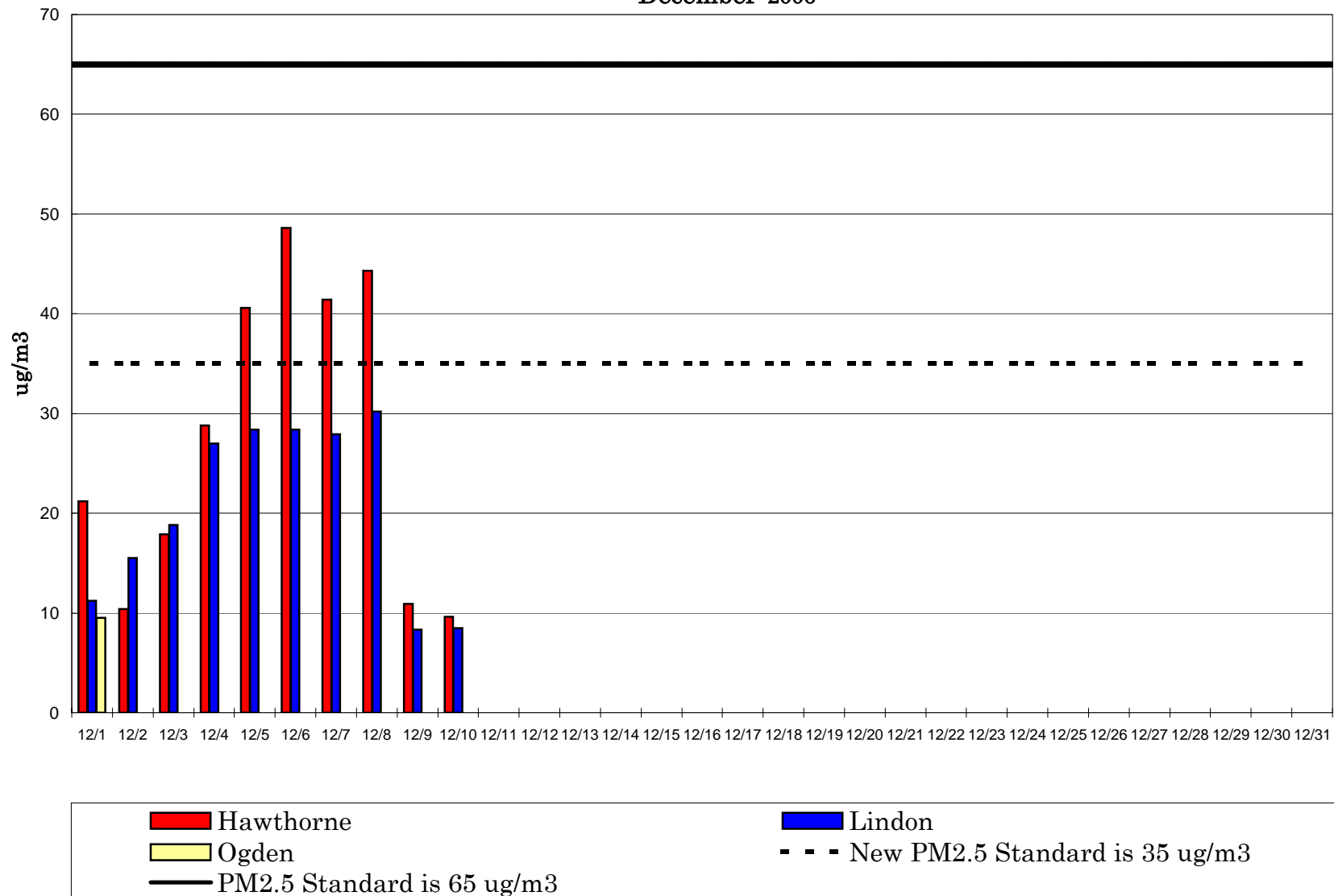
MACT Compliance Inspections	8
Other NESHAP Inspections	2
Asbestos Demolition/Renovation Inspections	8
Asbestos in School Inspections	14
Asbestos State Rules (Only) Inspections	1
Asbestos Notifications Accepted	115
Asbestos Phone Calls Answered	354
Asbestos Individuals Certifications Approved/Disapproved	68/0
Asbestos Company Certifications/Re-certifications	0/12
Asbestos Alternate Work Practices Approved/Disapproved	2/0
Lead-Based Paint (LBP) Inspections	7
LBP Notifications Approved	7
LBP Phone Calls Answered	77

LBP Letters prepared and mailed	31
LBP Courses Reviewed/Approved	0/0
LBP Course Audits	1
LBP Certifications Approved/Disapproved	1/0
LBP Company Certifications	2
Small Business Phone Calls Answered	6
Notices of Violation Issued	0
Notices of Noncompliance Issued	0
Compliance Advisories Issued	10
US Magnesium	
Red Rock Dry Cleaning	
TLC Neighborhood Cleaners	
Baird Drive-In Cleaners	
Lee Cleaners	
Mike Amundsen – AM Asbestos	
Philipoom Construction	
Bitner Excavating	
Joel Timo Construction	
Vai Construction	
SCANS or Warning Letters Issued	4
Settlement Agreements Finalized	1
Penalties Agree to	\$487.50
Home Improvement Services	\$487.50

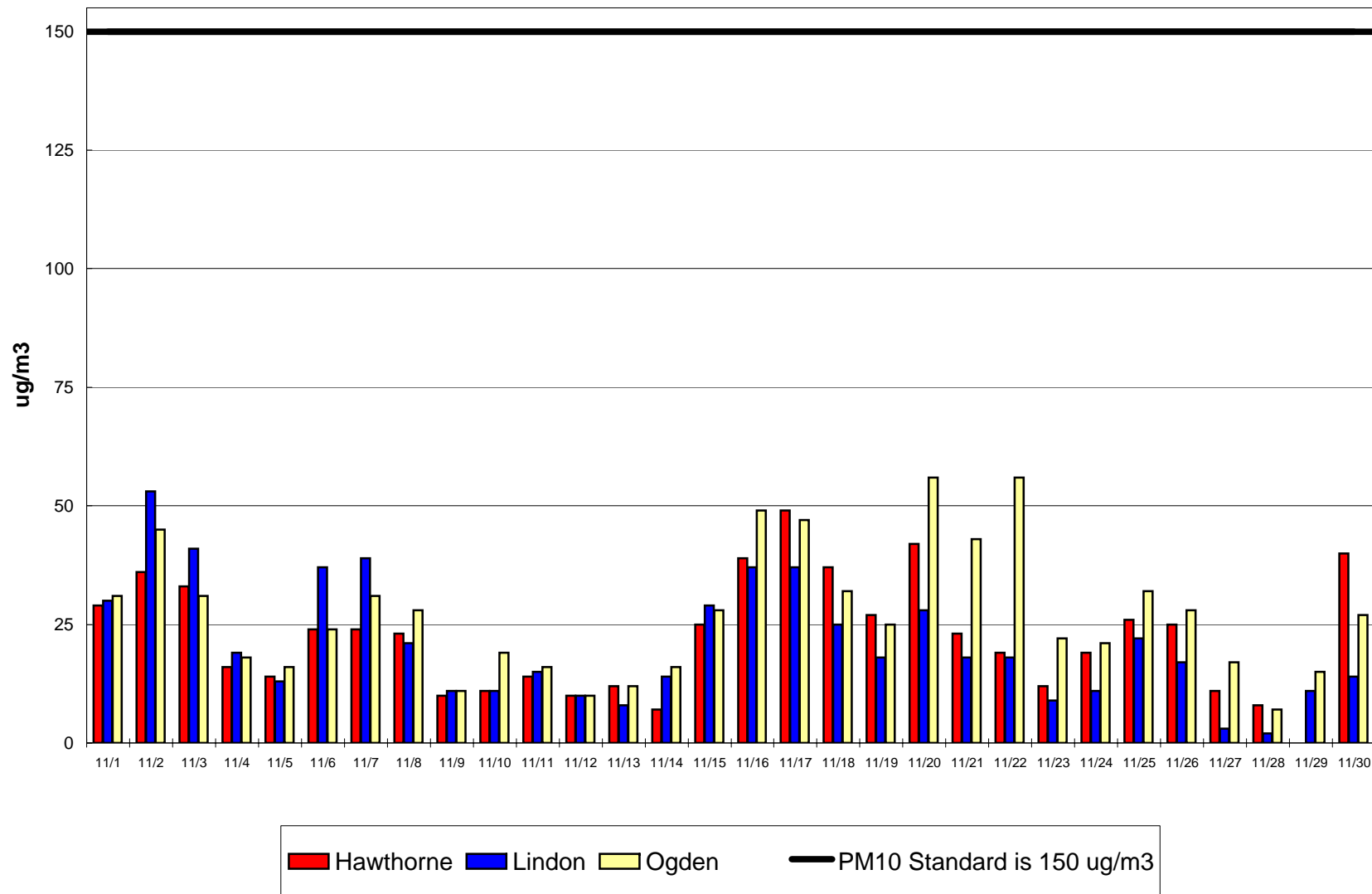
Daily PM_{2.5} Filter at Hawthorne, Lindon, & Ogden November 2006



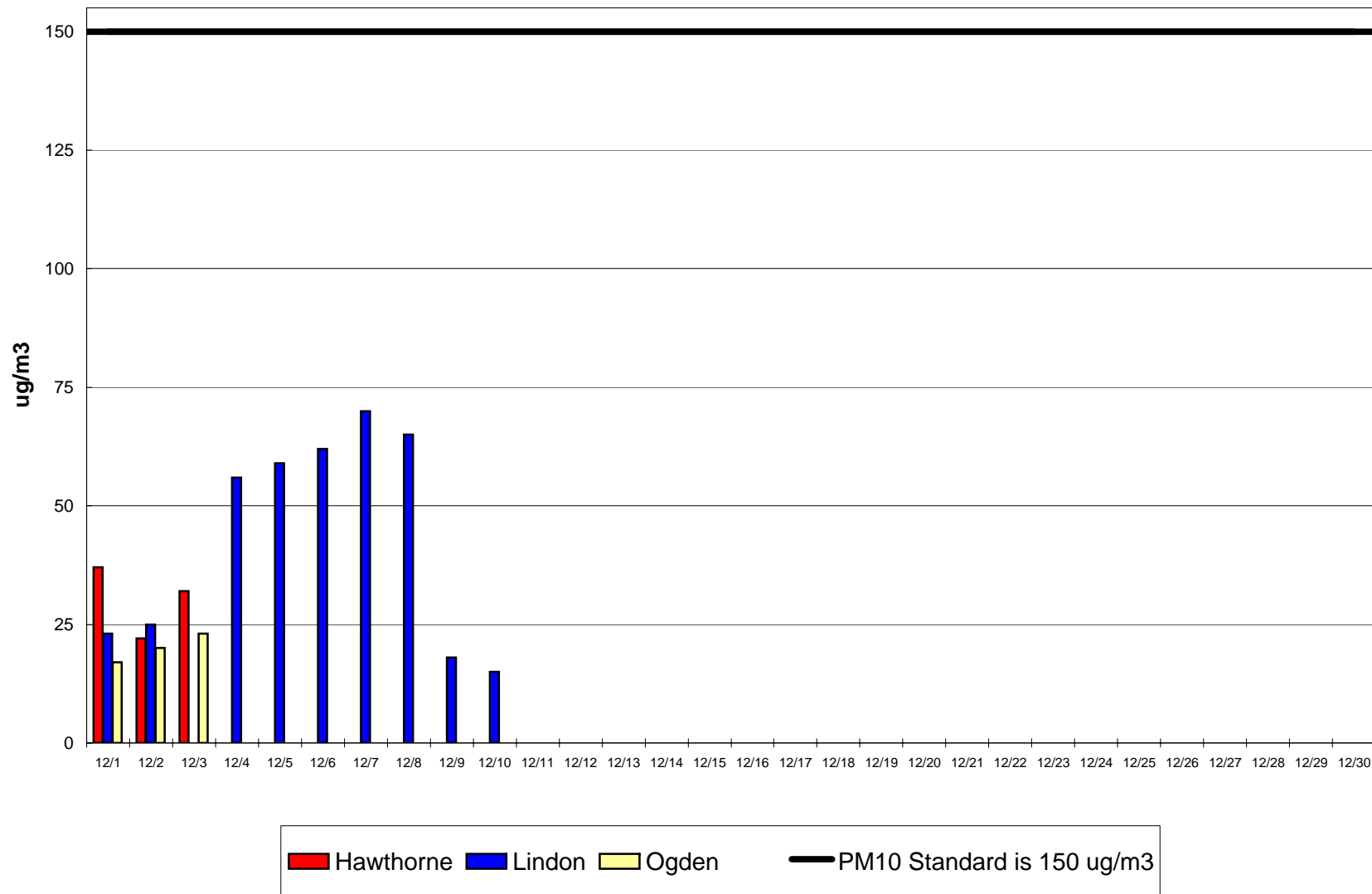
Daily PM_{2.5} Filter at Hawthorne, Lindon, & Ogden
December 2006



Daily PM₁₀ Filter at Hawthorne, Lindon, & Ogden November 2006

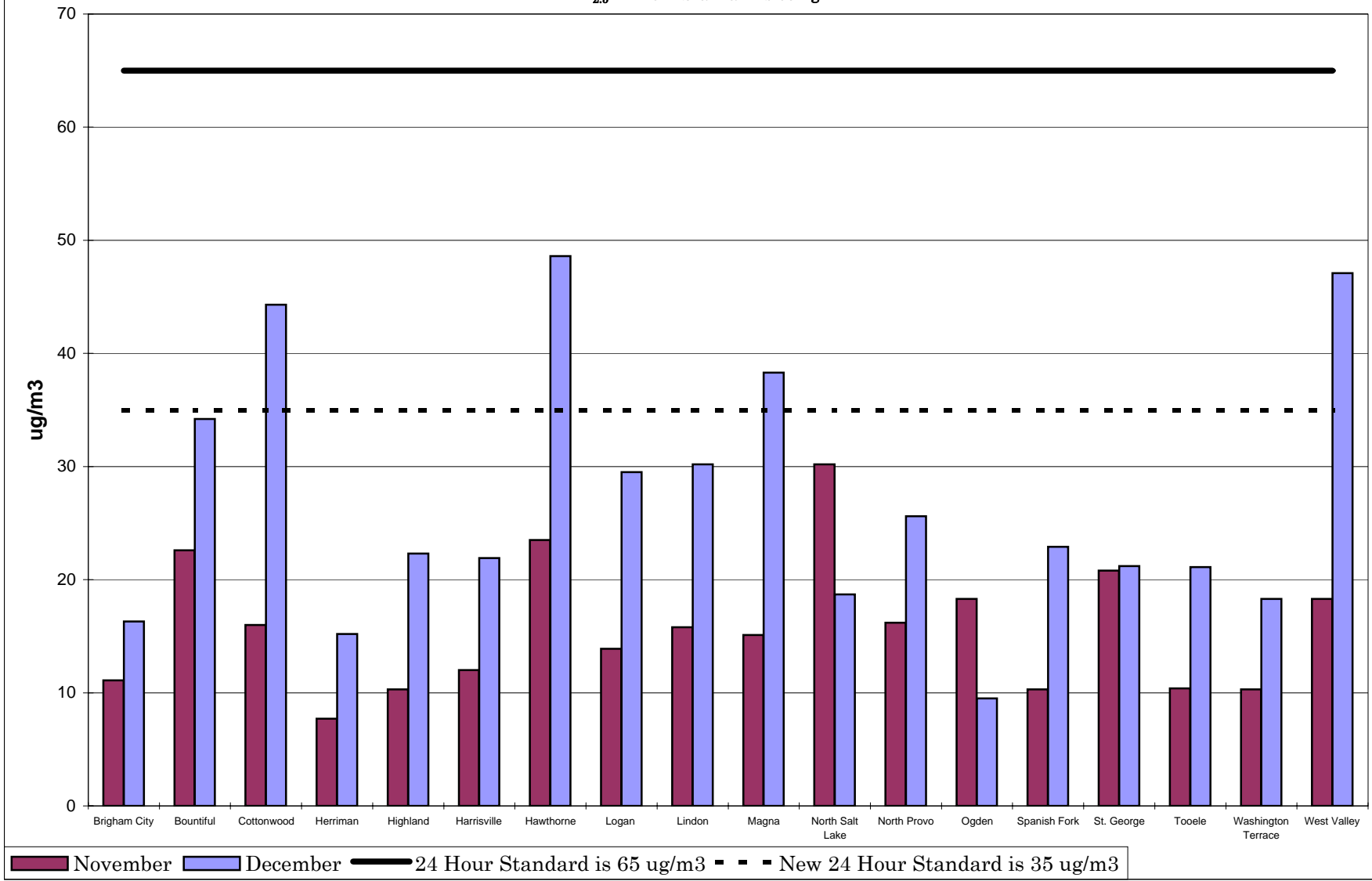


Daily PM₁₀ Filter at Hawthorne, Lindon, & Ogden December 2006



Highest PM_{2.5} Concentration for November-December 2006

PM_{2.5} 24 Hour Standard is 65 ug/m³



Highest PM₁₀ Concentration for November-December 2006

PM₁₀ 24 Hour Standard is 150 ug/m³

